THE BUILDER

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ST. ALDATE'S, OXFORD

THE good lady who used to advertise her apartments as "select" has now to search the dictionary for a fresh word to express the correctness of her establishment; for modern opinion has begun to realise that the "select" taste is a narrow taste, suggesting such a picking and choosing among the good things of life that imagination stands appalled at the treasures that must have gone into the dust-bin in the process.

Ruskin professed a deliberate selection in taste, though his natural responsiveness to beauty indicated more liberality than his professions. Architects in a not distant age fought the battle of the styles with amazing vigour, often to the outrage of the particular style favoured. Extreme modernists make themselves a law to discard all precedents, and succeed most when they break it. But for the rest of us, plain ordinary folk at whom none would stop to look even if we did pose, life presents as many facets as a diamond, and each as sparkling as another as the light catches it.

With no serious confusion to our sensibilities we are able to revel for a day in some old-world city, and on the next, experience a thrill at some bold stroke of modern town planning. With perfect consistency, we can delight in the anachronism of Staple Inn, refresh ourselves in the broad orderliness of Somerset House, or share a little pride in the best of modern London; for surely life deals out her blessings with both hands, and we are wise to grasp with both.

Perhaps our way is less obvious than in the days when men were bound fast in dogma—when Gothic was the only thing, or all but Classic anathema: when Wren was written copyist, or the Middle Ages barbarian. To such as these it was relatively a simple matter to choose between conflicting expressions of beauty, but with the more liberal outlook things are not always so clear.

Some such clash of ideals appears to threaten in connection with the widening scheme for St. Aldate's, at Oxford, and it is not the first occasion on which new lamps have been offered in exchange for old. Too often the fine craftsmanship of the new tempts not a few to barter the magic for the glitter. We must confess that we cannot share the equanimity with which a contemporary regards a project to transform this street of charm into a great modern highway. At least we would like to know the views of that excellent Town Planning Committee with which Oxford is equipped, before swallowing whole as a casual *fait accompli* a scheme of such tremendous importance. We are yet to be convinced that a curve to the eastern side of this street "will add much to its beauty," or that Wren ever intended the Tower of Christ Church to share a vista. But most difficult of all to accept is the very thought of new streets one hundred and six feet wide in connection with the Oxford we have known and loved.

Those who have known Oxford well, and who think of it as a unity and not as a mere collection of famous and interesting buildings and associations, will recall the narrow ranks of simple houses of varied and beautiful type, over the shoulder of which, so to speak, looked Tom Tower, to complete a perfect composition beloved of the artist. One could imagine the stage coach lumbering up the cobbles of such a street, even though much of it has been already ruthlessly swept away. The flutter of excitement which this mild highway invasion caused was but a ripple on the surface of peaceful contentment. One simply cannot imagine six lines or so of modern traffic hurtling over the same ground, unless one is reconciled to the city of Oxford becoming no more than a blob on the road map.

The demolitions which have taken place can never, alas, be put back in place, but modern talent is surely not so barren as to find it impossible to preserve something of the Cotswold manner that has left a host of treasures when the guide book has had her fill. We seem to read something of this intention into the wise ordinance that regulates the height of buildings in Oxford to a maximum which few modern cities would tolerate.

The old cities which straddle the highways share a common peril far greater than any which threatened with the coming of the railways. The new highway tends to carve its way through whatever would restrict its elbow room, and no longer respects the casual track of the Saxon peasant, and often not even the contours of nature. Sometimes, however, there are hills round which even the omnipotence of modern engineering skill has perforce to pass; while at others an area of inflated site values turns the scale in favour of a by-pass as against a street-widening scheme. Would it be too much to ask of the all-conquering stream of traffic that it should deflect itself this time not to force or expedience but out of respect for a treasure that is becoming yearly more rare—a city where one can retreat for awhile and forget that life is all a hurry and a skurry? Of course it is too much to ask! Let us live in no fool's paradise, but rather stress the material advantages that would follow such a policy.

A glance at the map (p. 4) will show that there is no serious obstacle to the laying-out of by-pass roads to deflect through traffic by way of open country, and it is obvious that valuable districts would thereby be opened up. It will be obvious also that the widening proposal will be absolutely ineffective as it stands without further ultimate deprivations, and that in the long run it is going to be far more expensive than breaking new country. Has anyone considered, either, the confusion at Carfax that would follow the introduction of an increased volume of traffic into this already busy centre? The idea of by-pass roads in the Oxford neighbourhood is no new one, and we are not claiming it as our own, but we certainly feel that the present occasion is one in which to consider the idea afresh, and decide in time whether it is not better than the way things are apparently going.

May we urge upon the Oxford City Council, before it is too late, the extreme urgency of finding a solution to their traffic difficulties without destroying the spirit of Oxford? They have been fortunate in their choice of officials, and we have no doubt that the proposed scheme at St. Aldate's is possessed of architectural qualities; but there are things which all the king's horses and all the king's men can never put together again once they have tumbled.

Too often have we seen a fine group of old buildings which have taken long to build and longer still to mellow, fade away in a night, so to speak; and for no better reason than that they have not been found in the text-books nor housed any famous men in their time. It needs more than the zeal of a Society for the Protection of Ancient Buildings to guard against such losses: it needs a public conscience alive to the treasures it holds and the bereavements it has suffered, before we may be sure that a wiser and more tender handling of the honest work of past ages shall prevail.

The zeal with which Oxford has protected herself against the inroads of industrialism lends courage to the thought that due deliberation will be brought to bear upon her traffic difficulties and upon the first steps to be taken in their solution. Oxford is a national heritage, and our friendly interposition, we feel sure, will not be taken as intrusive.

NOTES

Shakespeare Memorial Theatre.

WE congratulate Miss Scott on her success in the Stratford-on-Avon theatre competition. Believers in the influence of heredity will, perhaps, say she couldn't help winning, for the Scott influence has gone far, beginning with Sir George Gilbert Scott and carrying on through his two sons, George Gilbert Scott and Oldrid Scott, and culminating in the distinctive achievements of Sir Giles Gilbert Scott, who is, we suppose, a second cousin to the lady whose success we now record. We recognise the great ability shown in Miss Scott's design, more particularly in the plan, and we may leave the public to form their own opinion, which must be greatly influenced by the judgment of the assessors who place her as the indubitable first amongst several good designs.

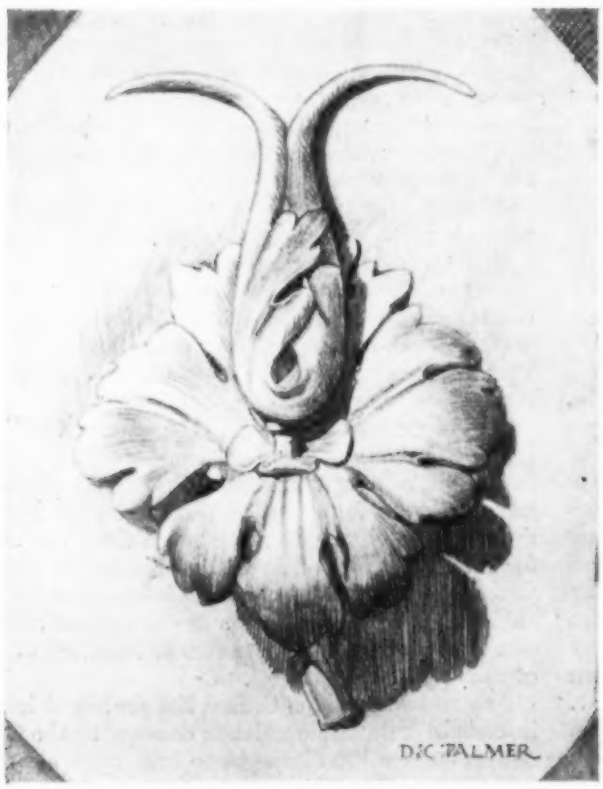
The Repair of Ancient Buildings.

WE propose through the coming six months to print a series of illustrated articles on the Repair of Ancient Buildings. These articles will be by Mr. A. R. Powys, A.R.I.B.A., secretary to the Society for the Protection of Ancient Buildings, who has asked the Editor of *The Builder* to seek the criticism of the readers of this journal, for Mr. Powys proposes at a later date to publish the articles in book form. He seeks to make this work of as much use as possible to those who may be interested in the subject, and for this reason would find criticism in these columns of great value. Through the whole of its existence *The Builder* has been keenly interested in the problems connected with this subject, though it has had, and may still have, different opinions than those which will appear in these articles. The Editor wishes to give what help he can in discovering the best methods to be adopted, and therefore welcomes discussion.

Early English Gothic Capital.
By MR. K. J. LINDY. (Regent Street Polytechnic.)

A Vision of Street Development.

WE are so accustomed to take things for granted and so seldom give rein to our imagination that we suppose the public have hardly ever realised what a wonderfully fine effect would be produced if the line of houses in Abingdon-street were set back so that an easy curved roadway could be opened out from the Ecclesiastical Commissioners' building up to Westminster Abbey. This roadway is an important one, for it leads to the Colonial Office's building and the Tate Gallery. Where in any modern city could we find such an association of wonderful old and new buildings as are congregated near here—the incomparable Westminster Abbey, Westminster Hall, the Victoria Tower of the Parliament Houses, and some half-dozen important modern buildings of no despicable quality?



Modern Ornament.
By MR. D. C. PALMER. (Regent Street Polytechnic.)

Lectures on Architecture for Children.

THE Royal Institute of British Architects can be congratulated on the success of the experiment of arranging for a series of three lectures for children during the Christmas holidays the first of which, on Friday last week, was attended by a large number of young people. As a matter of fact the first lecture had little to do with architecture, being on "Everyday Things in Roman Britain," but the lecturer, Mr. C. H. B. Quennell, knew just what to say of interest to his young audience as the various lantern slides were exhibited. The succeeding lectures will be on "Everyday Things of the Middle Ages" and "Everyday Things in the Renaissance."

New Handworkers' Gallery.

WE are glad to call attention to this new gallery which has been opened recently at 14, Percy-street, Tottenham Court-road. It is intended as a permanent showroom for our leading craftsworkers of either sex, most of whom live in the country, and includes work of some of our best-known traditional craftsmen. We say traditional, because the tradition of handwork, with its incalculably greater charm, is the basis on which the work is pro-

duced. We do not think there is yet nearly enough recognition of the opportunity which such a show-room offers to obtain things of beauty, or of the increasing facilities for obtaining them. Pottery, furniture, weaving, fabrics, etc., all of charm and excellence of quality, may be obtained to-day if we take the trouble to seek for them. Good things are to be valued for themselves, but if we are looking for a good investment of our money, in the things of use and ornament in our daily life, we can be reassured that though we pay a little more for them, their value is always an increasing rather than a diminishing one. If the public would understand also that a visit to schools such as the Central School of Arts and Crafts or the Camberwell School, to mention only these, offers at the time of their annual exhibitions an opportunity of purchasing the work of students in the crafts, they would take more advantage of the opportunity presented. For under the more enlightened methods of instruction to-day, they are producing work in the various schools full of charm and originality, as is well enough known to those fortunate enough to possess examples. Too much encouragement cannot, therefore, be given to such a show-room as the one now opened, to secure that this very sincere and beautiful craftsmanship may be more extended.

The Irish Loan.

THE new Irish Loan, of which £4,000,000 is to be raised in Dublin at 5 per cent. at 97, and just over £3,000,000 in America, is, we observe, to be partly allocated to the local loans fund, thus enabling local authorities to borrow on reasonable terms for housing and drainage. Up to the present, housing in Ireland has been based upon the system of subsidies, and, as we have discovered here, subsidies have the effect of sending up prices. Cheap money on long term loans is a vital necessity if housing schemes are to allow of anything like an economic rent, and it is the lack of such facilities in Ireland that has kept local authorities inactive while public utility societies have been going ahead. Compound interest mounts up astonishingly, and the difference between a short loan and a long one may make the difference between 9s. and 15s. in the rent.

Polytechnic Students' Exhibition.

SOME hundreds of drawings by students are displayed in various galleries of the Polytechnic building in Regent-street, and they afford good testimony to the abilities of the students and the wise direction which has guided them. It is satisfactory to note the absence of eccentricity and uncertainty which has often marked the efforts of students in recent years. We are inclined to think that there is less display of unusual or outstanding talent than might be noted some years ago, but a sanity and conservatism of outlook is always to be welcomed, and there are signs to-day that whilst our students are unlikely to be hide-bound by precedent, they are beginning to realise better what are the true essentials of good architecture. There is always a desire to attract attention by some means or other, even if a novelty of treatment overrides considerations of good taste or common sense. For the sake of a monumental treatment or an attempt to produce impressions of height or breadth, many designs which have the germs of good in them are spoilt. At the present time there is probably too much insistence on wide flanks of walling and square-outlined masses such as are most suitable in great open spaces of country, but which lack interest and vitality in town thoroughfares. The nice proportion between solids and voids, the interest and distinction to be obtained by agreeable points of emphasis in a façade and the aim for refinement and elegance (by no means dependent on the use of traditional orders in details) are qualities in designs too much ignored in students' work to-day. We only wish they were more apparent in the work of many practising architects.

Some Notes on the Work.

THE design by A. H. Gale, who has won the Bossom Gold Medal, is for a two-story café. It has very distinct merit and, whilst having a certain amount of dignity, remembers that it ought to exhibit something of lightness and gaiety as well. There is some right feeling as to the value of contour and the value of emphasis in detail. This design might very well form the basis for erection in some holiday resort, for it is infinitely better than the usual type of design one sees. Miss A. Hawtin is one who has distinguished herself. She takes the Batsford Prize for a sports pavilion which is generally well-planned, and is very well expressed in elevation. The essentials of good architectural effect are apparent in her admirably-drawn elevations. This lady has also a good housing scheme with well laid-out plans and with simple elevations. Exigencies of space prevent us saying all we might in appreciation of many efforts, such as the excellent colour sketches and clever design by Edward Lyons, the versatile collection of work by many other students, the excellent measured drawings by Fred C. Rendell, the very interesting collection of models of construction, etc. The students of the Polytechnic submit their work for various competitions and make good account of themselves. At the last two Intermediate Examinations of the R.I.B.A. there were selected, as typical of the desirable testimonies, work by students of the Polytechnic. We illustrate two examples of the students' drawings from casts.

The Winnetka Memorial, Illinois. (*See page 10.*)

MR. SAMUEL S. OTIS, Architect.

GENERAL NEWS

Professional Announcement.

We learn that the partnership as between Mr. Horace W Langdon, Chartered Quantity Surveyor, and Mr. J. Belmont Taylor has been dissolved. Mr. C. T. Every, P.A.S.I., goes into partnership with Mr. Langdon as Chartered Quantity Surveyors, practising at their new address—292, High Holborn, W.C.1.

New Year Honours.

Among the list of recipients of honours conferred by H.M. the King on the occasion of the New Year, appear the following names :—Privy Councillor : Sir Kingsley Wood, M.P. ; Knights Bachelor : Mr. John Reeve Brooke, C.B. ; Mr. Charles Igglesden, F.S.A. ; Order of the Indian Empire (C.I.E.) : Mr. Arthur Ralph Astbury ; Royal Victorian Order (K.C.V.O.) : Sir Frank Baines, C.V.O., F.R.I.B.A.

The Association of Architects, Surveyors and Technical Assistants.

As we announced in our last issue, Mr. John Mitchell, who has been Secretary to the A.A.S.T.A. for nearly six years, has resigned that office. The Council of the A.A.S.T.A. has appointed Mr. O. H. Cooke, M.A., B.C.L. (Oxon.), barrister-at-law, as Secretary to the Association, and he has already taken up his duties. Communications may be addressed to "The Secretary," Association of Architects, Surveyors and Technical Assistants.

Institute of Arbitrators.

In pursuance of its educational work, the Council of this Institute has made tentative arrangements for a series of lectures to be given by Capt. W. T. Creswell, Barrister-at-Law, on Evidence, Procedure and Practice In Arbitrations, at the London County Council Westminster Technical Institute, Vincent-square, Westminster, S.W.1. The lectures, which will open on January 11th, and be held weekly at 6.30 p.m., and continue until Easter, will be in the nature of a post graduate or "refresher" course. Those interested should communicate with Mr. C. McArthur Butler, F.C.I.S., Secretary.

Viscount Cecil of Chelwood will be the principal guest at the dinner of the Institute of Arbitrators on Tuesday, January 17, at the Criterion Restaurant. Mr. H. B. Chaplin Baldwin will preside.

OBITUARY

Herr Bernhard Hertel.

We record with regret the death, which occurred recently after a long illness, of Herr Bernhard Hertel, architect, who was responsible for the upkeep of the ancient fabric of the Cathedral of Cologne. He had been associated with the edifice since 1902, and it is almost entirely due to his advocacy by spoken and written word that sufficient funds have always been forthcoming to prevent the huge structure from falling into disrepair and collapse. Before being appointed to the post Hertel, who had a brilliant University career, had designed and erected a large number of churches in Germany and abroad. He was 65 years of age.

Mr. Archibald Macpherson, F.R.I.B.A.

It is with regret that we record the death of Mr. Archibald Macpherson, F.R.I.B.A., of Edinburgh. He was born in 1851, and was educated at Dr. Robertson's Academy and the Royal High School, gaining his professional experience under Sir Rowand Anderson and Mr. John Patterson. He designed a great number of churches and other buildings for the Roman Catholics, including those at Aberlour, Musselburgh, Rosewell, Grangemouth, and Bannockburn. The two latter churches were opened during the course of the past twelve months.

COMPETITION NEWS

Shakespeare Memorial Theatre Competition.

The award in this competition has been secured by Miss Elisabeth Scott, whose design is illustrated in this issue. The assessors' report is given on page 7.

MEETINGS

FRIDAY, *January* 6.

Royal Institute of British Architects (Children's Lectures). Mr. and Mrs. C. H. B. Quennell on "Everyday Things in the Renaissance." 4 p.m.

MONDAY, *January* 9.

Royal Institute of British Architects. Announcement of Award of Prizes and Studentships, 1928. Review of Designs and Drawings submitted for the Prizes and Studentships, 1928, by Mr. L. Sylvester Sullivan. 8 p.m.

Surveyors' Institution. Mr. C. Bailey on "Reports of the Royal Commission on Mining Subsidence." 7.45 p.m.

Edinburgh Architectural Association. Mr. C. A. Henshaw on "Bronze Figure Casting : an Outline of the Cire Perdue Process."

TUESDAY, *January* 10.

College of Estate Management. Mr. T. Alwyn Lloyd on "Modern Cottage Construction." 5.30 p.m.

WEDNESDAY, *January* 11.

L.C.C. Central School of Arts and Crafts. Sir Banister Fletcher on "English Mediæval Architecture : the pre-Mediæval Periods." 6 p.m.

Liverpool Architectural Society. Informal Talk by Mr. Ian McAlister on "The Work of the R.I.B.A." At Bluecoat Chambers, School-lane.

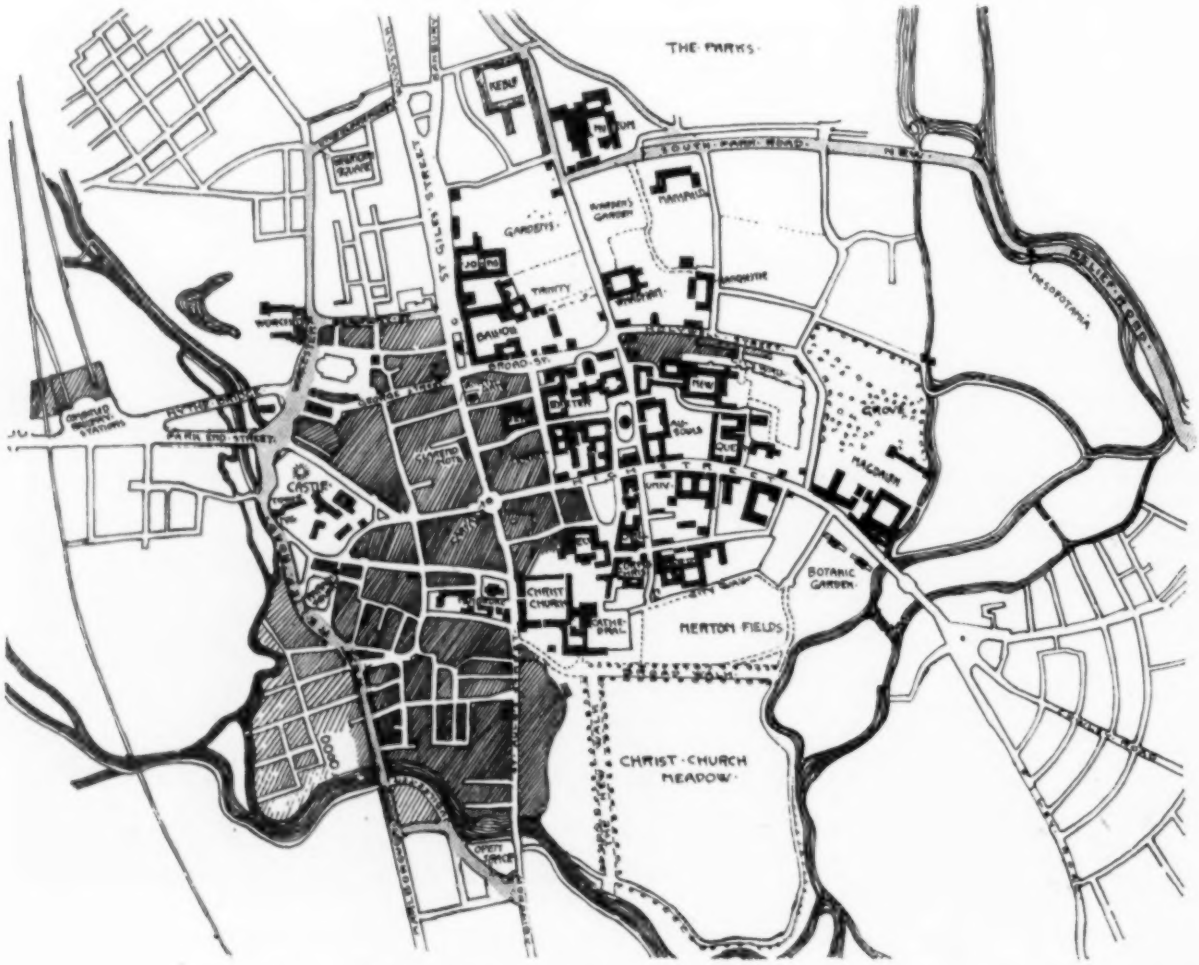
Institution of Electrical Engineers. Discussion opened by Mr. J. H. Parker on "Electricity in the Home." At the Cleveland Technical Institute, Middlesbrough.

THURSDAY, *January* 12.

London Society. Mr. H. Genochio on "Antiquities and Romance of His Majesty's Customs, with some Account of the Smugglers." 5 p.m.

Sheffield, South Yorkshire and District Society of Architects and Surveyors. Mr. E. G. Richardson on "Recent Developments in Acoustics." At the University, Sheffield. 6 p.m.

Institution of Structural Engineers. Major A. H. S. Waters on "Structural Engineering in Warfare." 8 p.m.



Plan of Oxford, showing suggested By-pass Roads.

The Winnetka Memorial, Illinois.

MR. SAMUEL S. OTIS, Architect.

THE ARCHITECTURAL ASSOCIATION

MODERN DECORATION.

MR. GILBERT H. JENKINS (President) occupied the chair at a meeting of the Architectural Association on Monday evening at 35, Bedford Square, W.C.1.

After the minutes of the preceding meeting had been confirmed, the President moved a vote of condolence to the relatives of the late H. J. Birnstingl, which was passed in silence.

It was announced that there were three nominations for membership, and the following new members were then unanimously elected :—

Mr. H. C. Inglis.
,, J. B. Gold.
,, H. G. Bishop.
,, A. Cooper.
,, D. J. Matthews.
,, R. K. Brett.
Miss M. J. Ryder.
Mr. J. R. Davies.
Mr. W. F. Young.
,, G. S. Buckingham.
Miss J. P. Venning.
Mr. R. J. Hersch.
,, H. R. B. Wayman.

Mr. G. G. Wornum, F.R.I.B.A., then read a paper on "Modern Decoration." He interpreted "modern decoration" as meaning "contemporary" covering all the work that was being done to-day, whether merely reproductive of old styles, adapted from old styles, or created from the outcome of new conditions. Owing to limitation of time, he did not deal with English work.

As artists, he said, they were interested in the art of the whole world, and with the easy facilities for travel, photography, journalism, and research, found, perhaps, their greatest impetus in studying the other man's art from their own point of view. But there were dangers in this which they did not always avoid. Claude Debussy once remarked that the perfectly sensitised artist should be able to hear a rose and smell a song. Though a trifle far-fetched, Debussy's remark embodied a valuable suggestion. They should be careful to submit any work of art to more than one of their senses. Unfortunately, many of them merely submitted a new idea to their sense of novelty, and if that was pleased they were satisfied. But a new idea, to be good, must do more than that; it must suitably serve a purpose, as well as give pleasure. And the danger with a great many modern forms was that they were attractive for their difference, rather than for their improvement in serving a specified purpose. Whatever art was, it must be representational of something. He suggested that these representational ideas were the chief basis for classifying styles, nationalities and historical periods. A mediæval chalice, for instance, might be found to be decorated with all the emblems of stone vault, buttress and pinnacle though made of thin metal, or it might assume the form of a vase surrounded by realistically modelled saints. In each case there was a representational idea, though one of sentiment only. They could find an antique vase, on the other hand, based entirely on abstract geometrical forms springing from the religious mysteries associated with those symbols. Its counterpart to-day would be a design of somewhat similar abstract forms, but springing from the geometric parts of machinery which were more and more dominating their thoughts. But they should bear in mind that though those two vases might be abstract in design they were both representational art, and though they were similar in appearance the sources of inspiration were entirely different. In this use of geometrical abstract forms the modern west was not only meeting the ancient east in one common language of æsthetics, but it was finding its most modern expression in archaic forms.

At the same time this was an age when the middle-classes dominated the world, and the greatest output of the arts was to serve the tastes and purposes of comparatively small and unimportant people, either individually or as whole communities. Any important development, therefore, existed only in so far as democratic governments and ideals allowed. One might take two examples of concerted democratic effort that were exerting considerable influence on the present time. The first example was that of Sweden, whose city hall in Stockholm was one of the greatest buildings of to-day and had given fresh life to all the arts and crafts of the country. Sweden's ideals being national, its new-found sources of inspiration were chiefly in the revival of its long-buried traditions. The democratic ideals of modern Russia, on the contrary, were in an exactly opposite direction. These ideals were to break entirely with national tradition and to start where the people found themselves now. He thought both these countries were a little too conscious of their aspirations, and that in each case the force exerted was a little too much for the load involved.

Whatever it might achieve, such tremendous vital force was the world's great requirement to-day. Why it was essential to start moving was very easily realised. The background of tradition was so crowded in on them as to allow neither thought nor vision, and they must escape to some more open space where they could do some real straight thinking. They had got to think out the many altered conditions of human life to-day. They had got new problems to face with their buildings for which no ready-made tradition lay at hand. They had to design large buildings comprising many small and diverse units; buildings on sites limited for light, air, and space; and entirely strange buildings demanded by modern industry and machinery. In actual building material and appliances they had food for straight thinking. They had at their disposal a wealth whose structural and decorative possibilities were bounded only by their imagination, and by the typical autocrat of the times, economy, who was as often as not a great encourager of invention.

Some of the factors in the mode of life to-day, confined more or less to their domestic influence, were : Reduction of servant labour; smaller meals, smaller kitchens, smaller homes; large open spaces; more daylight, better night light; better heating, ventilation, sanitation; discredit of dust-collecting features; improved fire prevention; more freedom of the sexes; drawing-room accessible to all, for smoking, drinking and recreation; dining-room solely an eating-room; generally a more communal sense; less desire for privacy; abolition of heavily curtained windows, high garden walls, and long useless corridors. Then there was the strain of living itself : more noise, more speed, more mechanical occupation.

These factors created a desire for as little burden of possession as possible. They demanded the dramatic for diversion, and the extremely simple for repose.

These remarks applied quite pertinently to modern decoration. Decoration was a form of finish put on an object, but the less elaborate the decoration the more decorative must be the structural form of the object itself. Structural form to-day, therefore, claimed the attention of the decorative sense quite as much as did its finish. And this outer shell, when finished, again claimed special attributes in the design of its furniture, fabrics, accessories, lighting, etc.

In commenting on a slide of an American interior, the lecturer said many American interiors represented one side only of that country's aspirations, namely, its desire to find its roots in western culture. As Beaux Arts architecture it was good and of sound proportion, but its columns were totally unnecessary, its coffered vault was a sham, and the lighting fittings were adapted from the days of oil lamps. But the representational idea was what that particular public wanted; it wanted a replica of a Roman Emperor's or French King's palace, available for the free use of a democratic republic. It was very sad that with its huge resources America had only created one type of building of the modern world—the skyscraper. Ancient Greece, with all its culture and resources, created only one type of building, the temple. Both types were mere adaptations of older forms. Greece made up for it by producing the world's greatest sculpture; America tried to compensate by evolving the most efficient plumbing and equipment.

In dealing with furniture, he said there was no need for new design, as many of the older designs were quite suitable for modern use. In these days there was no need for elaborate furniture or elaborate carving, but the use of plywood and veneers made surface treatment of outstanding importance. Plywood was increasing in favour on the Continent as a medium for wall coverings. In the new Stockholm Town Hall could be seen an interesting method of wall painting, in which the pictures were lightly brushed on to the plaster wall so that the texture of the wall showed through. His view was that the structural lines of a building should be emphasised rather than the wall spaces; the painter should emphasise the structural elements of the architect's design rather than the architect provide frames for pictures.

Work reproductive of old styles hardly interested many people to-day, except perhaps for the exercise of ingenuity in confining electric lights in candle fittings, hiding the wireless set, the telephone, the radiator, the passenger lift, the sanitary fittings, or making plaster to look like wood.

The psychology and reaction of the public to architecture should be studied. It was childish to imagine that all the language of, say, a Renaissance building could convey its full meaning to the mind of an untrained observer. According to the rules of its grammar pilasters were placed to echo columns, but the observer might merely find them annoying obstructions. The niceties of classic architecture were an unknown tongue to the modern public, and if the architect was really to give the service due from him he had to talk in his client's own language or his art would have no life.

The shrine or temple covering a worshipped god was one point of architecture, and the fortress wall the other. Every conceivable combination of the two was found in traditional architecture, and buildings were more often than not tortured into serving these traditions, and in their inefficiency they were tortured more uselessly than Mendelssohn's concrete for his Einstein tower and other works. The interior decoration was in most cases a representation of the exterior features, the portico and roof cornices being faithfully copied. Neither shrine nor fortress meant much to æsthetic sense to-day, nor in daily life.

Discussion.

In moving a vote of thanks to the lecturer, Mr. Charles Marriott said at present there was a tendency to take too literally Michael Angelo's saying that there was only one art, and that was the art of design. When Michael Angelo said that he took it for granted that people would realise that design depended upon the particular art employed, and although architecture had moved in the right direction, it seldom allowed for the services of the sculptor and painter.

The vote of thanks was seconded by Mr. Holmes Waghorn.

Mr. Charles Aitken (Director of the Tate Gallery) mentioned that recently the refreshment room at Millbank had been decorated with wall paintings with great success. In the matter of mural decoration, he thought it better for each artist to be responsible for a whole room, and if a dozen or so young artists could be engaged on such work he thought that by comparing notes they might possibly be able to build up a tradition of wall painting in this country.

Mr. Walter Bayes said the refreshment room at the Tate Gallery was more successful than the more ambitious schemes of providing historical paintings. It was very difficult to depict historical events in painting.

Mr. J. Alan Slater, Mr. Stanley Hamp and Mr. H. S. Williamson also took part in the discussion.

SHAKESPEARE MEMORIAL THEATRE COMPETITION, STRATFORD-ON-AVON

THE assessors in this competition, Mr. E. Guy Dawber, A.R.A., F.S.A., P.P.R.I.B.A., Mr. Raymond Hood, A.I.A., A.D.G.F. (New York), and Mr. Robert Atkinson, F.R.I.B.A., Director of Education, Architectural Association, have now made their award, the successful architect being Miss Elisabeth Scott. The architects taking part in the final competition were as follows:—(1) Messrs. Percy Tubbs, Son and Duncan, and F. Rowland Pierce; (2) Mr. D. F. Martin-Smith; (3) Miss Elisabeth Scott; (4) Messrs. Albert R. Mohr and Benjamin Moscowitz (America); (5) Mr. Albert J. Rousseau (America); (6) Mr. Robert O. Derrick (America).

In the course of their report to the Governors the assessors write as follows:—

"The six competitors all return their preliminary designs with very few alterations. The additional drawings required in the final competition have been very useful to the assessors in elucidating the details of the various schemes. The assessors congratulate the Governors on the high standard of the designs submitted, the whole of the series being admirably illustrated and in every way worthy of their subject. Most of the competitors have fully appreciated the value of a careful study of the site of the proposed buildings, and have endeavoured to harmonise their schemes with the town and locality. The assessors do not consider that any of the designs completely solve this very difficult problem, but further developments will undoubtedly remove any defects in the design chosen.

"The problem of a modern theatre on this exceptional site, worthy of Shakespeare's memory, is one which the assessors feel to be so important that time for very deliberate and mature consideration should be allowed to the selected architect before the work is commenced. For this purpose, and for the study of foreign theatres, they suggest that at least 12 months should be allowed to the architect, accompanied perhaps by the director of the theatre. The assessors also suggest that the Governors should employ an independent expert in theatrical equipment as a technical adviser to the architect; they feel that the opportunity to secure a really fine building should outweigh any financial consideration in securing the best possible advice.

"The assessors have unanimously chosen design No. 3 (by Miss Elisabeth Scott) as the most suitable design submitted. They consider that design No. 3 in its general conception, in its acceptance of the site difficulties and their solution, and in its architectural character shows great ability and power of composition. It has a largeness and simplicity of handling which no other design possesses. Its general silhouette and modelling to fit the lines of the river are picturesque and the character of the design shows consideration for the traditions of the locality; if any criticism is offered, it would be that brick for the external facings would be warmer and more harmonious with the general aspect of the town, and would at the same time be more economical.

"The general lay-out of the site is admirable. The new Bancroft Gardens are made to lead up to the buildings very successfully and parking spaces for cars are provided as suggested in the conditions. Good river terraces, steps and approaches are also incorporated; the treatment of the river being one of the great features of this scheme. The central approach across the gardens might be omitted, as it appears to cut the ground up rather needlessly, and the carriage approach to the main entrance is not ample enough and needs fuller consideration.

"Internally, the scheme gives substantially the requirements asked for, the stage being admirably arranged and the sighting and planning of the auditorium satisfactory. The assessors do not need to specify the details of the scheme, as the drawings will be able to express themselves, but they would point out one or two features where improvements could be effected. The duplication of foyers and refreshment rooms is needlessly extravagant. The boxes as shown are too large and their approaches too spacious. Some of the staircases do not comply with theatre regulations, in the fact that they have no external lighting. The gallery pay-box and approach might be better if planned further away from the main entrance.

"The author makes mention of a model—this model was not received by the assessors and was not seen by them; but a sheet of photographs of the model was admitted in lieu of a perspective drawing. The terraces and garden lay-out are not included in the cost of building.

"Cost: The assessors have checked the estimate of cost submitted and are of opinion that the cost as stated (£150,677) is too low, but they do not think that the total cost will exceed the 10 per cent. allowance as laid down in the general conditions. The cost of the scheme could be reduced in execution if the suggestions made by the assessors were adopted.

"A list of the cubical contents and costs, as estimated by the authors of the six schemes submitted, is appended:—

No. 1.—1,312,499	cube feet	£149,872	0 0
„ 2.—1,391,500	„ „	130,000	0 0
„ 3.—1,491,772	„ „	150,677	0 0
„ 4.—1,540,551	„ „	164,868	7 3½
„ 5.— 920,000	„ „	No cost given.	
„ 6.—1,600,000	„ „	150,000	0 0

Miss Elisabeth Scott, winner of the Shakespeare Memorial Theatre Competition.

The Successful Architect: Some Biographical Notes.

Miss Elisabeth Scott, daughter of a doctor, was born at Bournemouth in 1898. She is twenty-nine years of age. Educated at Redmoor School, Canford Cliffs, Bournemouth, she began her architectural studies at the Architectural Association School in 1919 and took the full five years' course and diploma in 1924. The A.A. also is thus to be congratulated with Miss Scott on her success. During the past three years she has been following her career as architect with Mr. Louis de Soissons, F.R.I.B.A., at Welwyn Garden City, Mr. Oliver Hill, F.R.I.B.A., in London, and Mr. Maurice Chesterton, F.R.I.B.A., at Hampstead. She will now enter into partnership with Mr. Chesterton.

Miss Elisabeth Scott's grandfather, a Brighton doctor, was brother to Sir Gilbert Scott, the well-known Victorian architect. Her grandmother was sister to another highly esteemed architect of the period, Mr. George Bodley, a direct descendant of the founder of the Bodleian Library. Miss Scott is second cousin to Sir Giles Gilbert Scott, architect of the Liverpool Cathedral.

The Shakespeare Memorial Theatre is Miss Scott's first success in competition work. She felt interested in the announcement, but took four months' consideration before she began her design. In this she was much assisted by the instructions sent out to architects and the aerial view of the site published in the Press. This view showed the river, the trees, the bridges and the old theatre before it was burned down.

In her design Miss Scott has endeavoured to express by the outside of the building the internal needs of the theatre. She decided to make the stage block with its need for height for scenery and "flies" the culminating feature of the building instead of attempting to camouflage it by a false facade. The site she regarded from the first as one wonderfully adapted for the purpose of theatre-planning, since it naturally provides a fan-shaped auditorium, and in so doing itself assists in solving the acoustic problem. The requirements of the Governors in the matter of seating accommodation were also helpful to the architect, inasmuch as she had in mind an intimate theatre with ample space around it for the freedom of movement and assembly so desirable in such a meeting-place of people.

The theatre will seat 1,000 people, approximately 400 in the stalls and boxes, which are on the level of the stalls and behind them, 300 in the dress-circle, and 300 in the gallery. With a theatre of this size on the space provided it was possible to provide ample foyer and refreshment accommodation. Here, too, the architect was helped by the proximity of the theatre to the river, and her plan provides for an extension of the refreshment space to a terrace on the river bank in the summer-time.

The river comes again into the design with a landing-stage, giving access to those who arrive by water. The possibility of flooding, such as is now occurring in the Avon Valley, made it desirable to place the theatre on a platform, which again gives a terrace all round and steps leading down to the river level in places. For the same reason all the offices and dressing-rooms are on the platform level or above it on a level with the dress-circle and gallery.

Miss Scott has provided ample stage space for the varied uses to which the theatre will be put. The stage can be used as an apron, Greek, or modern stage. A soundproof, movable partition, between the stages of the old theatre and the new, will enable both these stages to be thrown into one if desired at any time. In this and in the extra space provided on either side of the stage provision is made for productions on a much larger scale than would be expected from the size of the auditorium and the general planning of the theatre.

In the general plan it will be seen that the old theatre remains, as the Governors desired, as a Conference Hall, and its established curve is balanced by the more gradual curve of the front of the new theatre. In the bold circular tower the internal need for a wide stairway taking visitors to the upper levels is emphasised.

Viewed as a whole, the new theatre combines with the new bridge across the Avon and the reconstruction of the gardens and old canal basin to make a complete and harmonious plan, which should give Stratford-on-Avon not only the Memorial Theatre but a notable example of modern site-planning.

Intermediate Examination: Testimonies of Study.

Special attention is drawn to the fact that the eight sheets of Testimonies of Study required of candidates for admission to the R.I.B.A. Intermediate Examination may now be submitted on six dates during each year. The following dates have been fixed for 1928: February 29, April 11, June 29, August 31, October 9, December 31.

THE PRESERVATION OF ST. PAUL'S

SIR,—Any uncertainty about Mr. Harvey's sectional diagram on the line of the great pier is, I think, rather due to the ambiguity of his terms than to misinterpretation on my part and the difficulty of understanding what he really means both in his book and his criticisms to which I drew attention in my first letter.

Whether sections should be drawn on tangential or radial lines to indicate the problem actually makes no difference to the point at issue, for however drawn the position of the wall of the peristyle and the overhang of the inner drum relative to the pier is nowhere as indicated by Mr. Harvey nor as shown in his book. In the building it is as shown on figures 3 and 4 in my diagrams published by you on December 9, 1927, and the actual dimensions of the building figured on these diagrams prove this.

Mr. Harvey's misunderstanding both of Sir Christopher Wren's design and of the construction of the building will be manifest at once if he will add figured dimensions to his section. To make this even more plain I have completed Mr. Harvey's sectional diagram as I understand he claims it should be drawn, section A, figure 1A, and have added to it a plan figure 2A, and for comparison a section through the building on exactly the same lines, section B figure 3B, and plan figure 4B, showing the section through the transepts complete. A comparison of these diagrams with the previous diagrams supports my contention that the position in which the sections are taken makes no difference to the facts.

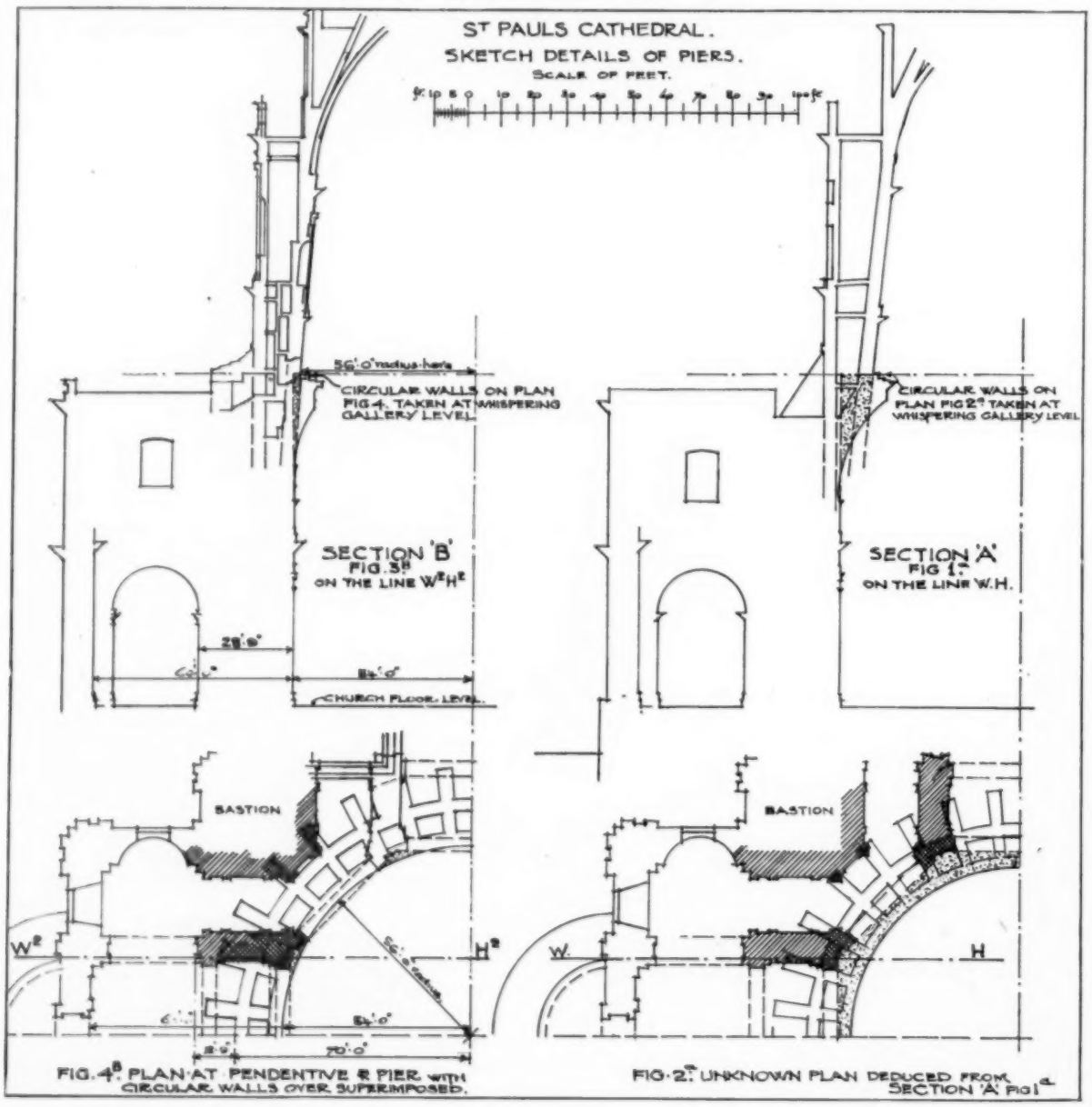
In his reply Mr. Harvey appears to have fastened on these trivial points and has neglected to reply to all the points of real importance raised by me, which vitally affect the difference of the understanding of Sir Christopher Wren's design by the members of the Commission and by those who advance alternative proposals for rebuilding the piers, nor has he dealt with my criticism of the destructive nature of his proposals for his comprehensive conservation of St. Paul's Cathedral.

In my letter to *The Builder* of November 25, 1927, I questioned the correctness of Mr. Harvey's diagnosis and the practicability of his cure, and invited him to put forward a clear scientific statement of both which would enable your readers to judge which view of Sir Christopher Wren's design is correct and whether this important work was being dealt with satisfactorily by the custodians or whether there was really any practical alternative proposition likely to lead to a more beneficial and satisfactory result.

Mr. Harvey is apparently unable or unwilling to discuss the matter on these lines, or even to say whether my understanding of his proposals, of which I gave diagrams and details in my letter of December 9, are correct or not, and especially to say whether the extensive mutilation and defacement of the Cathedral (which I gather from his description are involved by the execution of his scheme of conservation) are all which are necessary or not. As I have previously pointed out, my qualifications are quite immaterial, for your readers are really interested not in the personnel connected with this work or its criticism, but with the building itself, and the preservation of Sir Christopher Wren's design.

My comment on both the preservation work and the alternative proposals (which for all practical purposes amount to suggestions for rebuilding the piers instead of repairing) are based on long and careful study of the reports of the various Commissions and cathedral surveyor's reports, and of Mr. Harvey's book and his proposals, and letters of eminent architects in the Press. To the best of my ability I have endeavoured both to draw out and to work out both schemes, and have made rough models, because it seems to me that the preservation work at St. Paul's Cathedral is one of the most important and extensive works of restoration which have been undertaken in this country for many years, and apart from the interest of St. Paul's Cathedral itself, the results of the work must prove of the greatest educational value to the architectural profession and may well form a precedent for similar work in the future.

The fundamental difference between the diagnosis of the Commission of Preservation and the adopted work and all alternative proposals lies in the appreciation of Sir Christopher Wren's design. The Commission pointed out in their final report that the natural internal arch action in the lower part of the inner drum below the great windows (about 40 ft. in depth) has the effect of transmitting the weight borne by the piers


ST PAULS CATHEDRAL.
SKETCH DETAILS OF PIERS.
SCALE OF FEET.
56'-0" radius here
CIRCULAR WALLS ON PLAN FIG 4. TAKEN AT WHISPERING GALLERY LEVEL
CIRCULAR WALLS ON PLAN FIG 2a TAKEN AT WHISPERING GALLERY LEVEL
SECTION 'B' FIG 3B ON THE LINE W²H²
SECTION 'A' FIG 1a ON THE LINE W.H.
28'-6"
84'-0"
CHURCH FLOOR LEVEL
BASTION
BASTION
W²
H²
W.
H
84'-0"
70'-0"
FIG. 4B PLAN AT PENDENTIVE & PIER WITH CIRCULAR WALLS OVER SUPERIMPOSED.
FIG. 2a UNKNOWN PLAN DEDUCED FROM SECTION 'A' FIG 1a

directly to them without making great demands upon the ribs of the main arches themselves. Their scheme and the general proposals formulated in their final report and subsequent development as the work has progressed are directed to dealing with defects which have arisen from the separation of the two greater circular girder walls, the inner carrying the domes and the outer the peristyle, by means of which Sir Christopher Wren carries the superstructure.

The opposite view, which has led to the alternative proposals for recoring or rebuilding the piers, is apparently based on a fallacy, namely, that the ornamental arches support the girder walls, and that the inner circular wall or drum supporting the domes stands out several feet clear of the supporting piers, and by so doing conducts their weight on to the small portion of the pier top by the pendentives. Hence the load reaches the piers not only in a concentrated form, but with a dangerous over-turning tendency, which is only partly restrained by the buttressing action of the transepts, nave and choir. The diagrams illustrating my letter of December 9, 1927, and those accompanying this letter clearly show that no such construction exists in any part of St. Paul's Cathedral. This again was clearly pointed out in the final report of the Commission, who showed that the load of the superstructure of some 14,000 tons from the inner dome and some 7,000 tons from the peristyle is not brought on to the piers by the coffered or single arches or in a concentrated form, but is distributed over a considerable area, practically one half of the front part of the piers, and that if the two great circular walls with their connecting cross-walls had remained connected together as a monolithic structure this load would be so distributed over the piers, that they would be well calculated to support it with such minor repairs as were required to remove the defects which had arisen from independent action of these walls due to lack of adhesion bond and tie, which Sir Christopher Wren could not reasonably have anticipated. The defects therefore are not due to Sir Christopher Wren's design, as Mr. Harvey contends, but to defective materials, as the Commission claim.

Mr. Harvey has propounded a scheme in great detail for dealing with a hypothetical condition, which is shown upon figure 1 of my diagram, which shows, as he argues throughout his book, that the outer drum rests upon the piers at the extreme edge of the inner face and the inner drum is entirely unsupported and carried on corbels, and he entirely ignores the fact that the piers extend right up to the circular girder walls as immensely strong and massive abutments and the circular walls function merely as short girders spanning from pier to pier, such arch action as exists being the natural internal arch action of these walls, and the ornamental arches have little or nothing to do beyond supporting the triangle of masonry below the natural arches.

An examination of the construction of these ornamental arches proves conclusively that this was the intention of Sir Christopher Wren's design, and the arches are not designed in themselves or in the method of their attachment to the piers to carry the weight of these girder walls with their superimposed load, and Sir Christopher Wren has taken precautions to prevent them doing so. These precautions appear also to have been overlooked both by Mr. Harvey and those who advocate the rebuilding of the piers.

As the Commission state, it is not possible with the building as it now exists to make exact calculations or an exact estimate of the distribution of the weight, and it can only be a matter of opinion and judgment. The evidence of the building itself is conclusive that no such weight or load as would result from the concentration of the load of the superstructure on the piers by the kind of arch construction which is found in Gothic cathedrals has ever taken place, and, moreover, it is impossible because, if brought on by arching, the load would rest almost entirely upon the core, and very little upon the Portland stone, and might approach anything between 25 and 50 tons per square foot. Such a load must have produced far greater and more serious crushing effects than are to be found.

Working out Sir Christopher Wren's design as closely as the conditions permit, the actual load per square foot of the bearing of the superstructure upon the piers must be somewhere near 15 to 20 tons per square foot, which is a load that the piers can quite easily carry with reasonable repair and some compensation for the deficient bond and tie due to the manner of their construction, such as is being supplied by the preservation work as I understand it.

This view is supported by the fact that the piers themselves at the church floor level have stood from the time they were constructed up to the present entirely upon the core. At this level the pressure has been in the neighbourhood of 15 to 20 tons per square foot on the core itself, and has not produced really serious settlements, but, on the contrary (so far as one can gather from the published reports of the Works' Committee and the information obtained from the grouting), the core had consolidated to a very great extent, and, although there appear to have been cracks and cavities in places, they were not such as would have resulted from a concentration of pressure brought down in the manner feared and described by those who advocate the rebuilding of the piers.

In considering this matter, it must be borne in mind that although St. Paul's Cathedral has probably been more profusely illustrated than most buildings, plans and illustrations which exist are to a very large extent pictorial, and those who formed their opinion at the time when the dangerous structures notice was served had really no precise or complete scientific data upon which to consider the matter. The very fact that published reports of the various Commissions had been directed to special circumstances, as has been pointed out, tended to confuse the issue and to make it more difficult for those who were not intimately acquainted with the building to form an independent and considered opinion of its condition and requirements. With the information now available it would appear that the grouting and reinforcement as executed by the Works' Committee in carrying out the adopted report has been an evolution of methods previously known and used applied to the special conditions existing at St. Paul's, and so far as can be seen it has achieved the first and important purpose of supplying the deficient adhesion, bond and tensile strength, which would make the redundant strength of the structure to resist compression function to its full extent.

There is little doubt that if the various members of the structure could be made to act together as intended in the original design, any competent architect or engineer of to-day could rebuild St. Paul's Cathedral in strict accordance with Sir Christopher Wren's design, using the same material which Sir Christopher Wren used, with the assistance of Portland cement instead of lime mortar, and rather more scientific bonding of the Portland stone casing than exists, or than the builders appreciated was necessary in carrying out what to them was a new departure from any existing construction at that time. As a matter of fact, the dome and its supports as designed by Sir Christopher Wren are a self-supporting independent structure, and it needs but little extraneous support or abutment from the surrounding building of the nave, choir and transepts.

Sir Christopher Wren appears to have anticipated in a most remarkable way the theories of arch construction, which were developed some 60 or 70 years later, and of which only some faint indication may possibly have existed in his day. This is particularly noticeable in the design of the domes and the cone, whose peculiar shape is a development of a catenarian curve, of which, as far as is known, there is no previous example.

There can be little doubt that any attempt to recore or rebuild the piers would, as Mr. Harvey points out, involve a practical reconstruction of the whole of the dome area, including the domes themselves. The shoring required would alone involve such transference and redistribution of the weight that it would impose, at least for a time, a concentrated load upon the subsoil, the effect of which it would be impossible to foresee, but which could not fail to have the most disastrous effects upon the foundations as they exist. In addition to the mutilation and interference with the existing structures which Mr. Harvey describes, this shoring in itself is of the most far-reaching and drastic nature, and to erect it and make it efficient would entail almost as much interference with and destruction of the building as the remedial work itself, in fact, the cure would be far worse than the disease.

We know what the interference with the structure of carrying out the adopted scheme involves, but we do not know, nor has anyone yet clearly announced, all that any alternative proposals may entail, and must be known if a proper comparison of the two views is to be made.

INQUISITIVE.

CORRESPONDENCE

While we are glad to publish letters on professional and other matters of interest to our readers, it must be understood that we do not necessarily endorse the remarks of correspondents, who will oblige us if they will express their views as briefly as possible.]

A Defence of Quantity Surveyors.

SIR,—I fear your correspondent and I are not likely to agree about the "assailable position." With regard to the suggestion that I have shifted my ground, if "qualify" is used in the ordinary dictionary sense of "to furnish with knowledge, skill, etc., necessary for a purpose" or "to fit for any place, office or occupation," this qualification and training are near enough allied for all practical purposes. I agree that there is a further meaning of the word implying the diploma of a professional body, and that it has a very great value; but a man may be thoroughly qualified to do work without having this official cachet.

I observed last week that a quantity surveyor was advertising for a "taker off," but no "qualification" in your correspondent's sense was asked for. I expect that, if the applicant was able to do his work it would go out on the responsibility of the technically qualified employer without question.

NORTHERN FELLOW.

THE ULSTER SOCIETY OF ARCHITECTS.

The annual general meeting of the Ulster Society of Architects (Incorporated) was held in the Scottish Provident Buildings, Belfast—Mr. John Seeds presiding. The report of the Council was presented by the hon. secretary, and unanimously adopted. The financial statements submitted by the hon. treasurer showed the Society to be in a satisfactory position. The President, in his address, referred to the inclusion of the Society in the Architects Registration Bill, and the large amount of work which had been undertaken in co-operation with the R.I.B.A. On the question of architectural education, he said, the Council had taken definite steps, and the recent public lectures by Professor C. H. Reilly were the beginning of a series which they hoped to introduce for the purpose of developing a wider appreciation of the aims and work of the architect.

The annual election of officers and Council for 1928 resulted as follows: President, Mr. E. R. Kennedy, F.R.I.B.A.; vice-president, Mr. John Seeds; hon. treasurer, Mr. R. H. Gibson; hon. secretary, Mr. T. R. Eager. Council: Major J. Ferguson, Messrs. J. P. M'Grath, G. A. K. Robertson, G. O'Neill, and W. D. R. Taggart. Associated members of Council: Messrs. J. G. Smyth and C. Love; hon. auditors, Messrs. J. Scott and S. M'Ilveen.

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ILLUSTRATIONS

Shakespeare Memorial Theatre Competition.

We illustrate this week the winning design in this competition, that of Miss Elisabeth Scott (see p. 7). It was one of six selected by the assessors (Mr. Cass Gilbert, Mr. Robert Atkinson and Mr. E. Guy Dawber) to take part in the final competition. In the final selection, Mr. Raymond Hood took the place of Mr. Cass Gilbert.

Cottages for the Neath Guardians.

We give this week a pair of cottages for the Neath Board of Guardians. They illustrate a new departure in the method of caring for orphan children, who formerly were boarded out in various houses. Each cottage accommodates twelve children and a foster-mother. Messrs. Gibb and Smith, L. and A.R.I.B.A., of Borough-chambers, Neath, were the architects. The general contractors were Messrs. Waring, Cole and Waring, of Neath, and the plumbing was done by Mr. T. Beddoe, of Neath. The cost, including boundary walls, back road and tar paved playgrounds, was approximately £5,750

Women's Christian College, Madras.

This building was formally opened on November 29, 1925, by His Excellency Viscount Goschen, Governor of Madras. The accommodation contained in the building consists principally of science laboratories and lecture rooms, with their professors' rooms, preparation rooms, store-rooms, etc., sufficient for the teaching of physics, chemistry, botany and zoology up to the B.A. standard of the Madras University. As the college had no hall suitable for collegiate gatherings and entertainments, the building was arranged to include this very necessary feature for life in a residential college. In plan the building is a rectangle approximately 245 ft. by 160 ft., containing two internal courtyards symmetrically placed, each approximately 75 ft. by 55 ft. The college hall is situated between these courtyards.

The principal front, in the centre of which is the main entrance, faces towards the college compound and main building. Although this front faces west, it had been possible to avoid a verandah owing to the natural screen formed by the many beautiful trees in the compound. The architects' design for this elevation is a simple colonnade formed of Doric columns running up the full height of the building. These columns, besides assisting to soften the light entering the rooms on this front, give the building a simple dignity at a cost considerably less than that of a verandah.

The omission of a verandah on the west side of a building in Madras is usually inadvisable, but in this case the result has justified the departure from ordinary practice.

Many minor modifications both in plan and detailing were made during construction and the original drawings, therefore, differ in many instances from the photographs of the work as actually carried out.

The science rooms are divided into four principal departments, viz., physics, chemistry, botany and zoology, for each of which there is complete and separate accommodation for Intermediate and B.A. classes. All the laboratories obtain light from two sides and the majority of them have windows facing north, unobstructed by verandahs. The types and arrangements of the fittings, fixtures and furniture in each room have been made a special study by the professors concerned and the architects, and the results embody the most approved practices followed in American, English and Indian Universities. The single story block containing the B.A. rooms has been designed to permit of future extensions at first-floor level. The college hall has its main axis on the centre of the west elevation; therefore its main entrance door is immediately opposite the main entrance to the building. In height it occupies the full height of the building and is 75 ft. by 50 ft. in plan. It is surrounded on three sides by a gallery, access to which is obtained from the first floor. This gallery is intended to accommodate the students on important occasions only, ordinarily the main body of the hall will be sufficient for this purpose. This gallery is supported by Doric columns, over which columns of the Ionic order support the main segmental plaster ceiling. The stage has a semicircular proscenium opening, and has been designed to be suitable either for lectures, ceremonial functions or dramatic performances, as occasion demands.

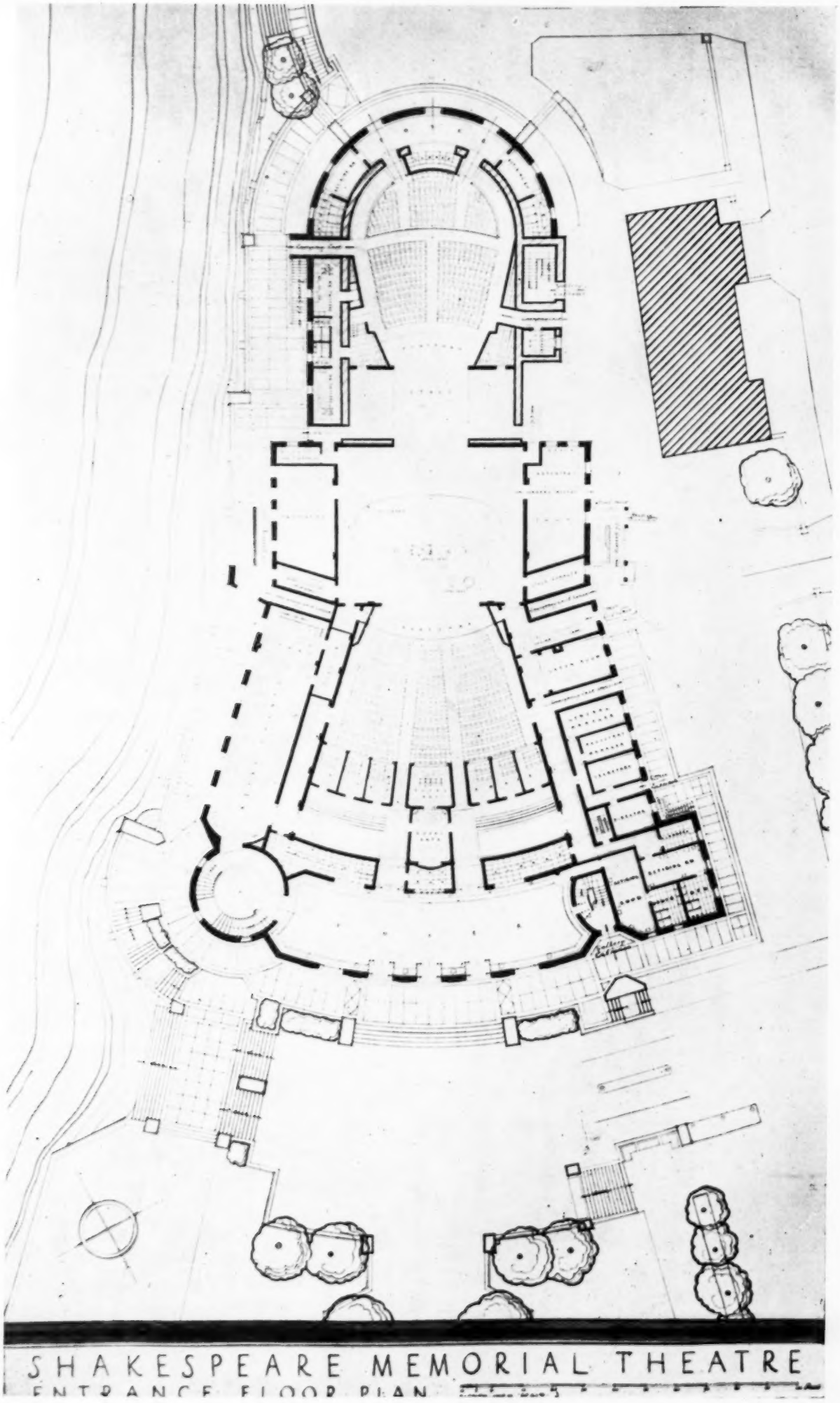
The total cost of the building has amounted to approximately £35,000.

The architects were Messrs. Jackson and Barker, of 22, Broadway, Madras. Mr. E. J. B. Greenwood, M.Sc., M.I.E.E., M.I.E., designed the electrical installation in consultation with the architects. Messrs. Mansfield and Sons, of Calcutta, supplied and erected a gas-producing plant of their own design. The overseer in charge of the work was Mr. A. E. Ponnuthambi.

Winnetka War Memorial, Illinois.

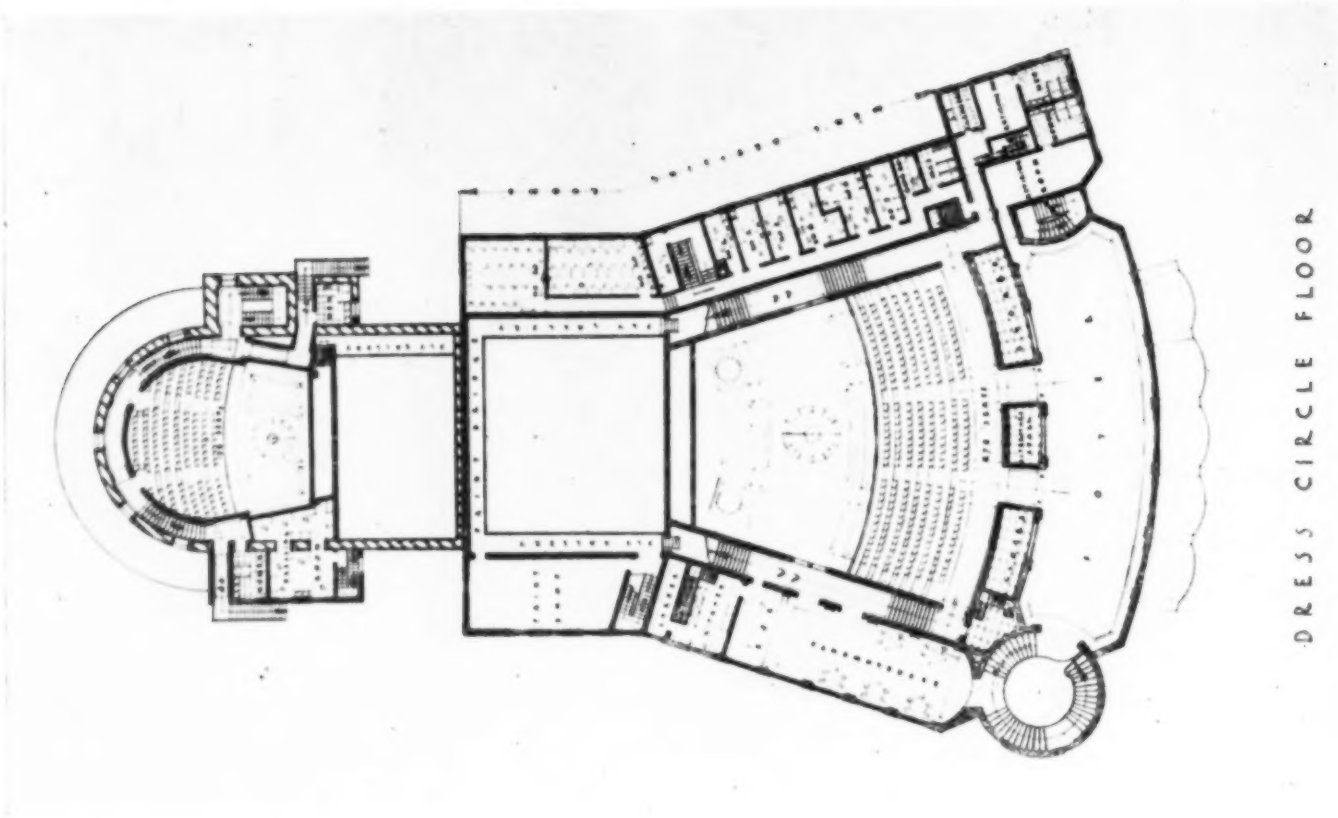
This memorial consists of a monumental flag-staff, which rises above a platform, on which stands a cenotaph featuring the commemorative tablets to the ten men whose memory is to be perpetuated. It is situated at the crest of a slight rise of land on the west side of the village common, which is annually the site of patriotic ceremonies and community festivals. The memorial, which has cost £8,000, was the subject of a competition won by Mr. Samuel S. Otis, a student of the Harvard architectural atelier and of the Massachusetts Institute of Technology. The platform, steps, the benches and cenotaph proper are all cut from specially selected Tennessee marble. At either end, north and south, of the cenotaph at the west of the flag-staff are two bronze eagles. Atop the flag-staff another eagle is mounted with wings in air, and surmounting a crest motive, having a total height of over nine feet. This entire cresting is covered with fifty square feet of beaten gold. The staff itself is cut from the huge trunk of an Oregon fir and contains no heart wood, this splendid timber being over 200 years old. The bronze base of the pole is composed of a series of superimposed motives, and on the extreme lower member stand four griffins with raised wings, symbolic animals betokening guardianship in ancient heraldry. These four griffins face the intercardinal points of the compass respectively. The total weight of the bronze used is 3,540 pounds, or over one and one-half tons. A gravel walk surrounds the entire monument. At the west of the cenotaph are the five marble tablets, on which are incised the names of the ten men whose memory is to be perpetuated.

Shakespeare Memorial Theatre Competition. Winning Design.
MISS ELISABETH SCOTT, Architect.

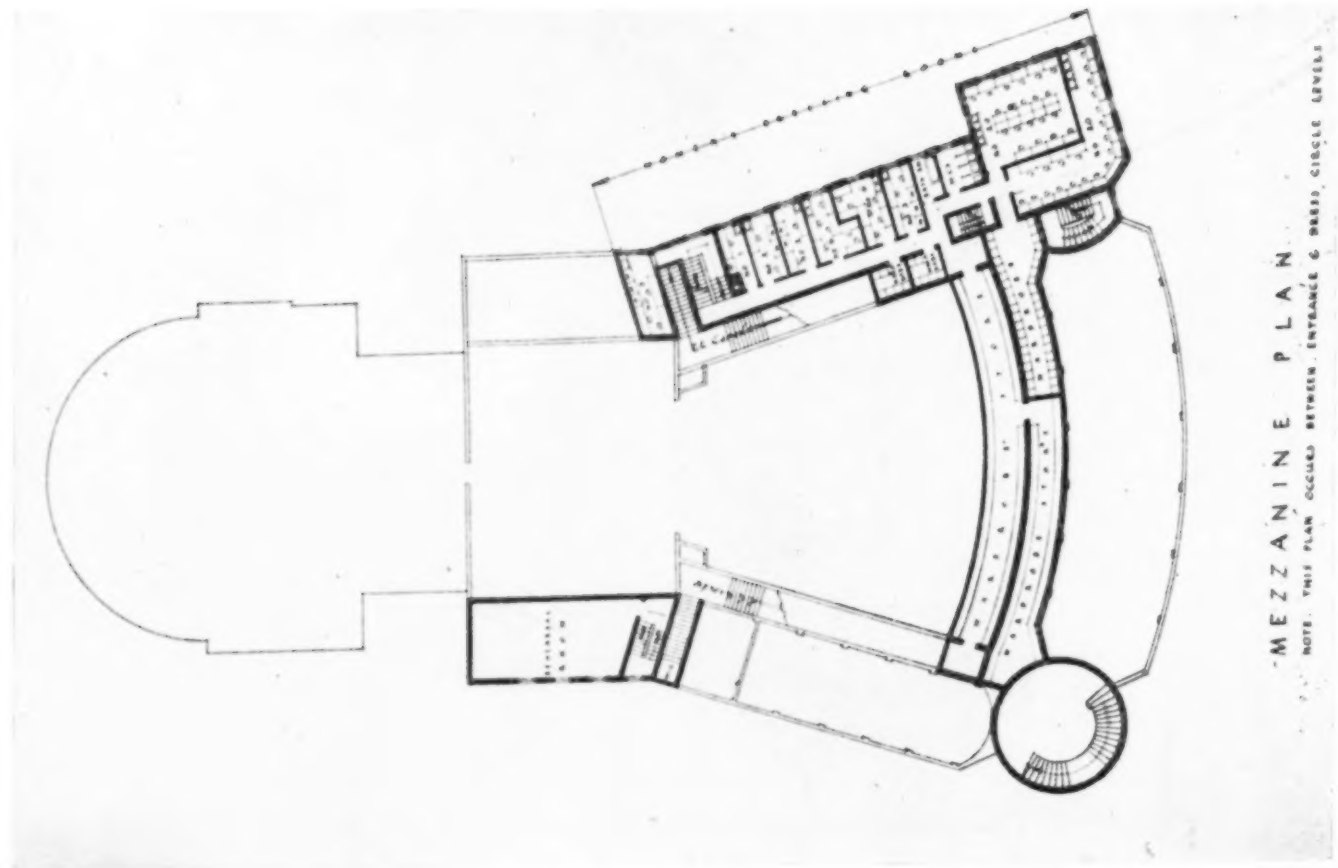


Shakespeare Memorial Theatre Competition, Stratford-on-Avon : Winning Design.

MISS ELISABETH SCOTT, Architect.



DRESS CIRCLE FLOOR



MEZZANINE PLAN

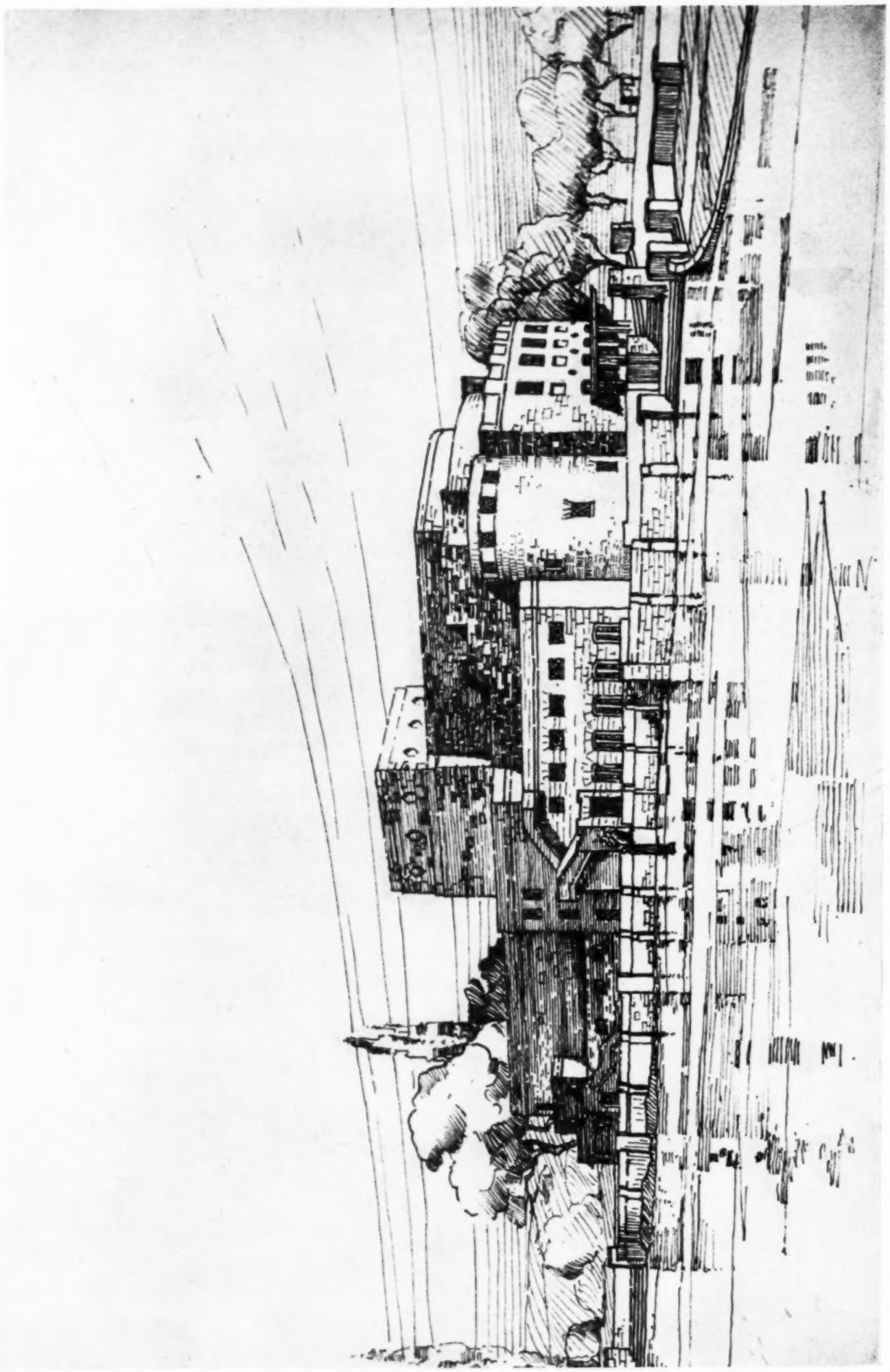
NOTE. THIS PLAN OCCUPIES BETWEEN ENTRANCE & DRESS CIRCLE LEVELS

Shakespeare Memorial Theatre Competition: Winning Design.

MISS ELISABETH SCOTT, Architect.

MISS ELISABETH SCOTT, Architect.

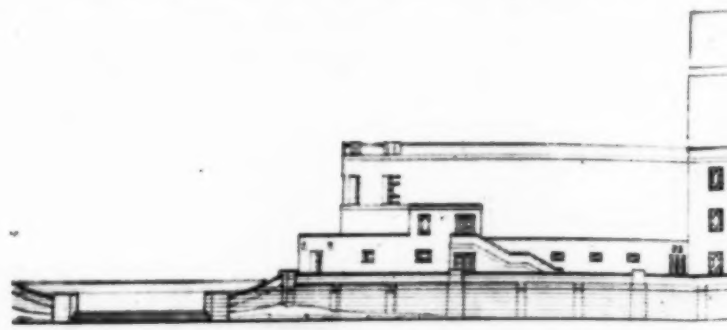
UNIV. OF MICH.

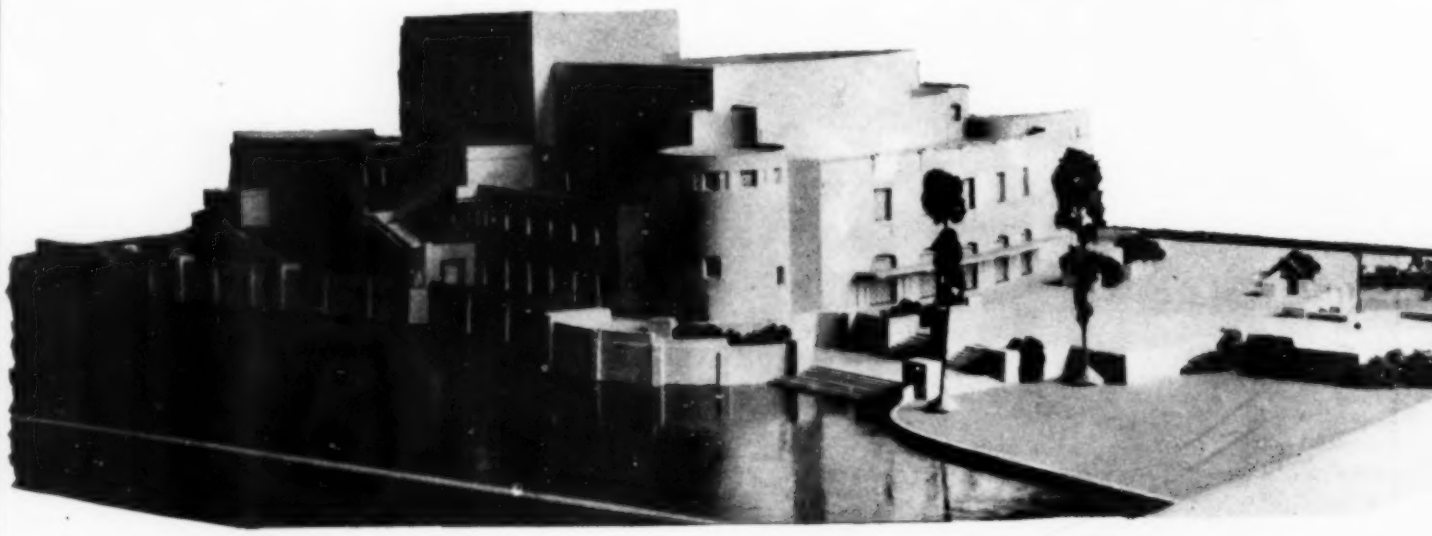


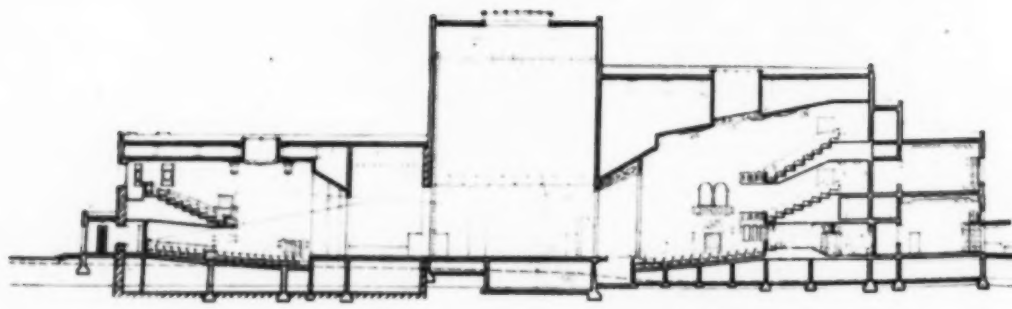
Shakespeare Memorial Theatre Competition, Stratford-on-Avon : Winning Design.

MISS ELISABETH SCOTT, Architect.

UNIV. OF MICH.



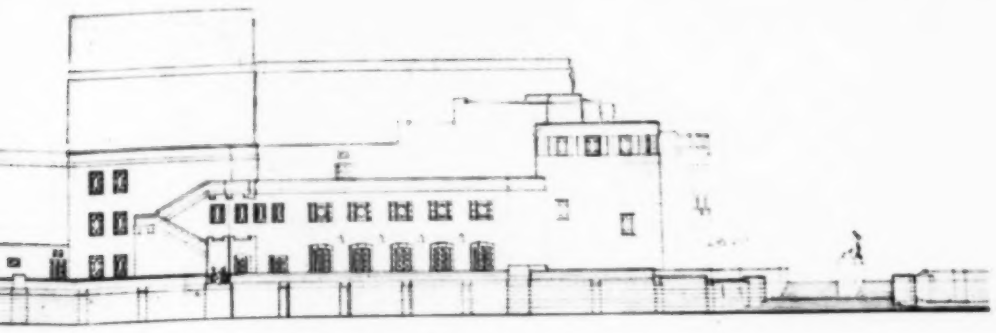




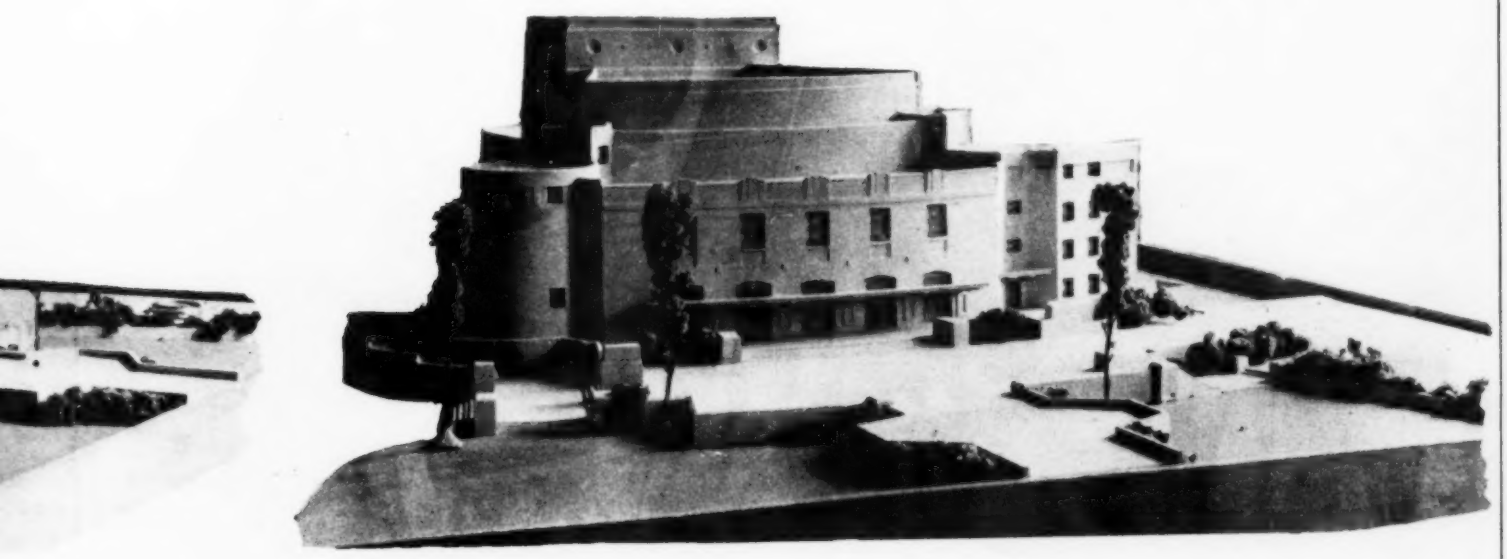
LONGITUDINAL SECTION

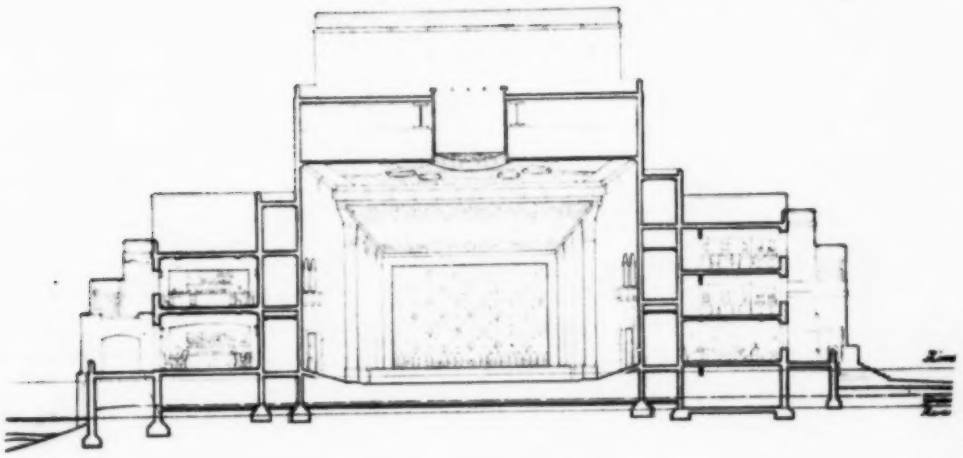
SHAKESPEARE MEMORIAL THEATRE COMP

Winning Design by Miss



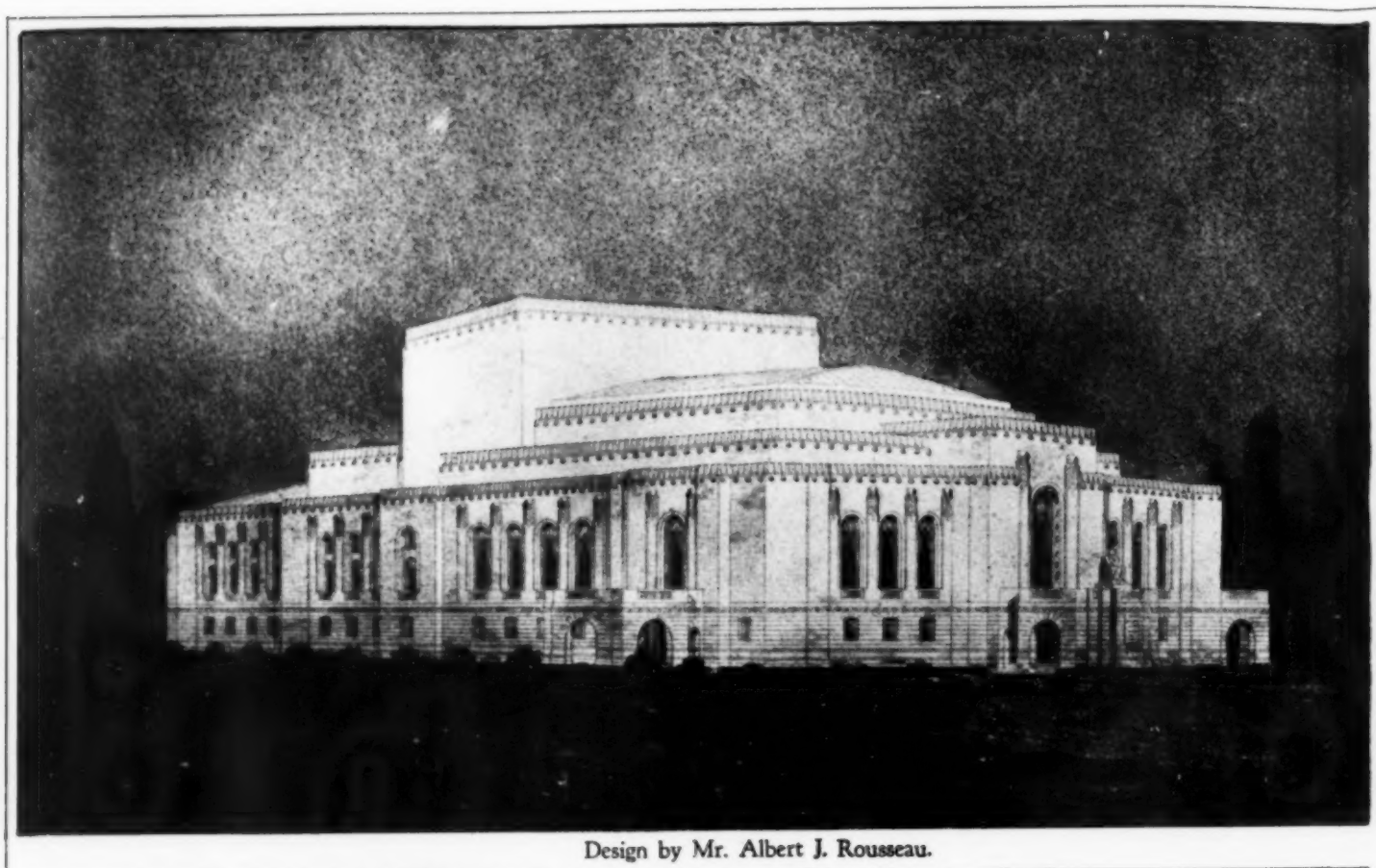
RIVERSIDE ELEVATION



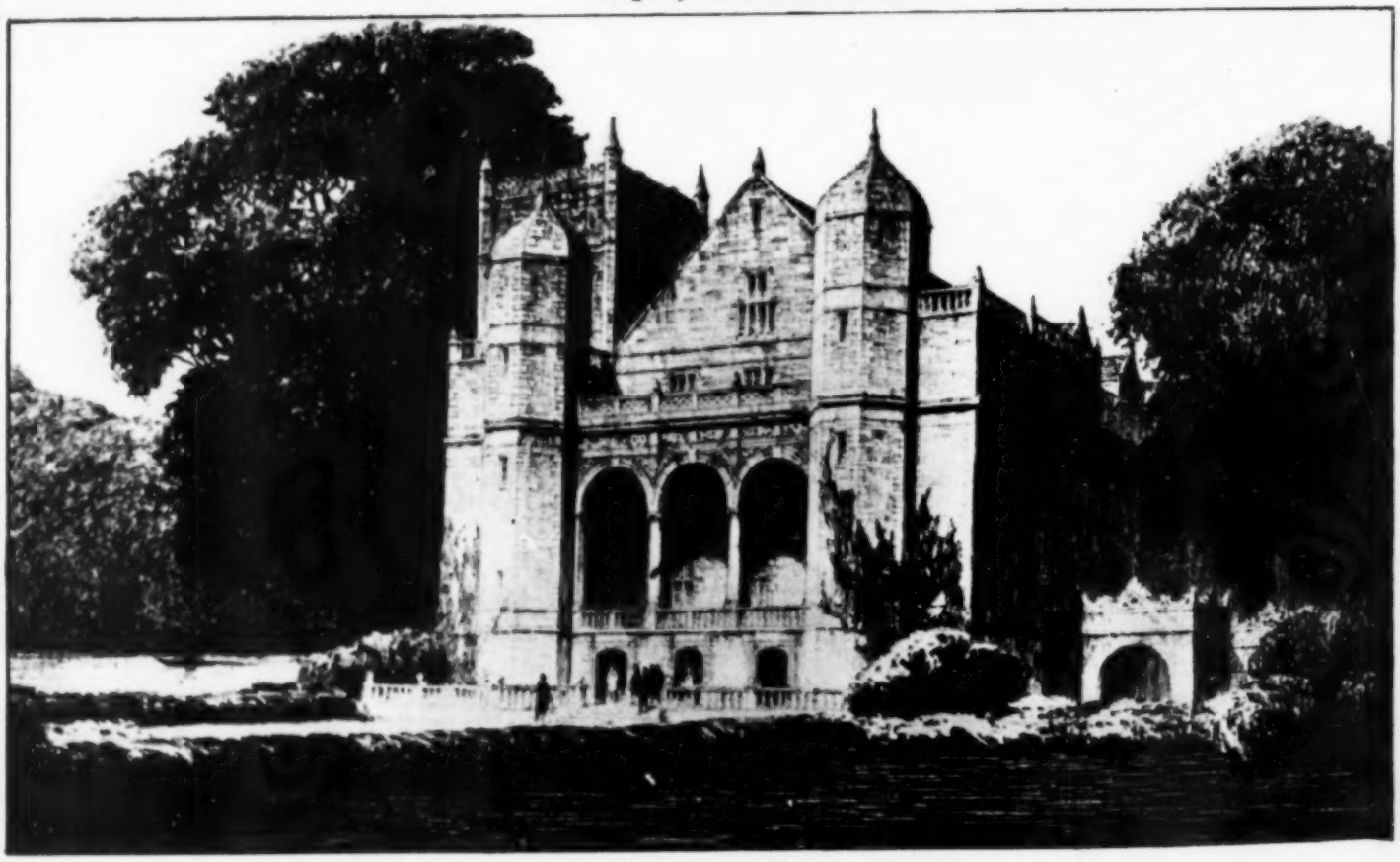


CROSS SECTION

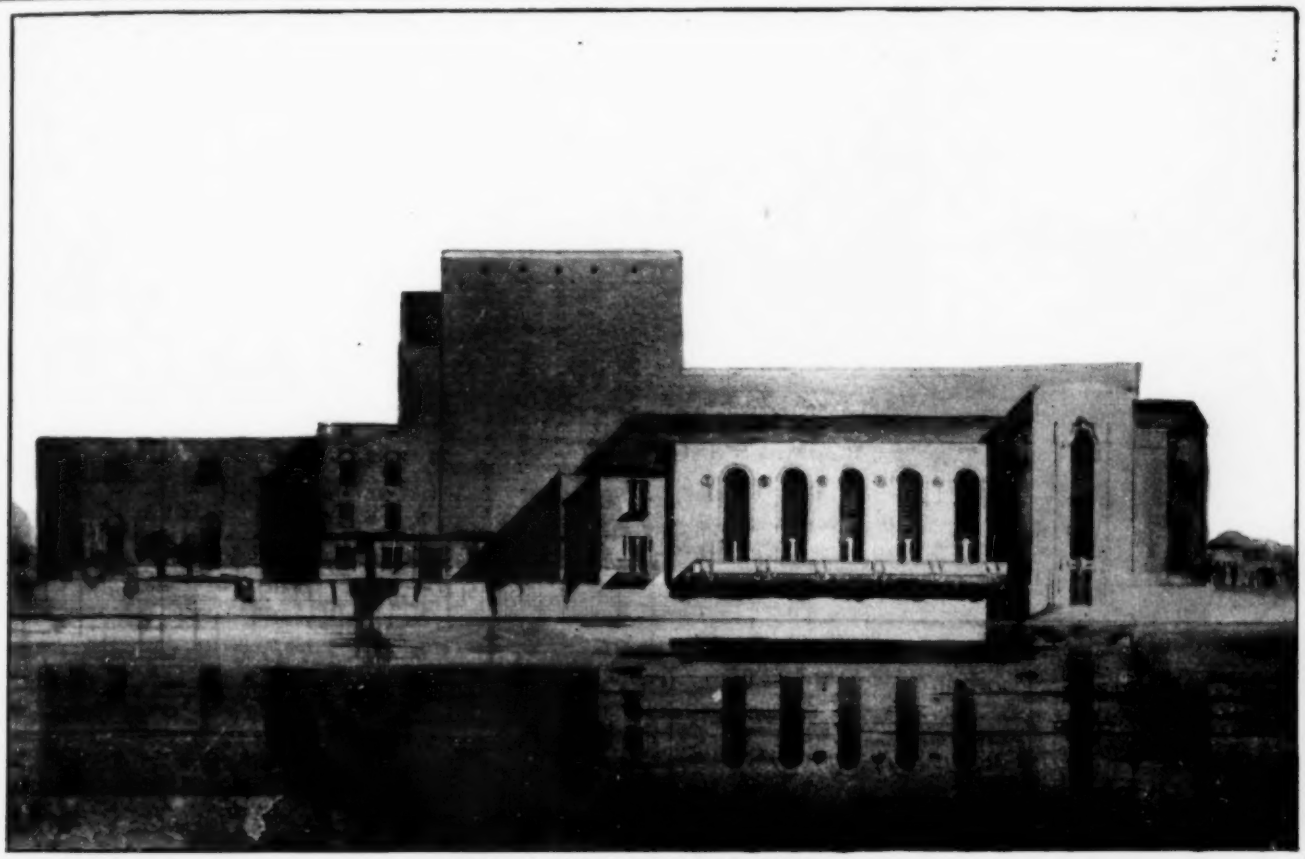
EATRE COMPETITION, STRATFORD-ON-AVON.
ign by Miss Elisabeth Scott.



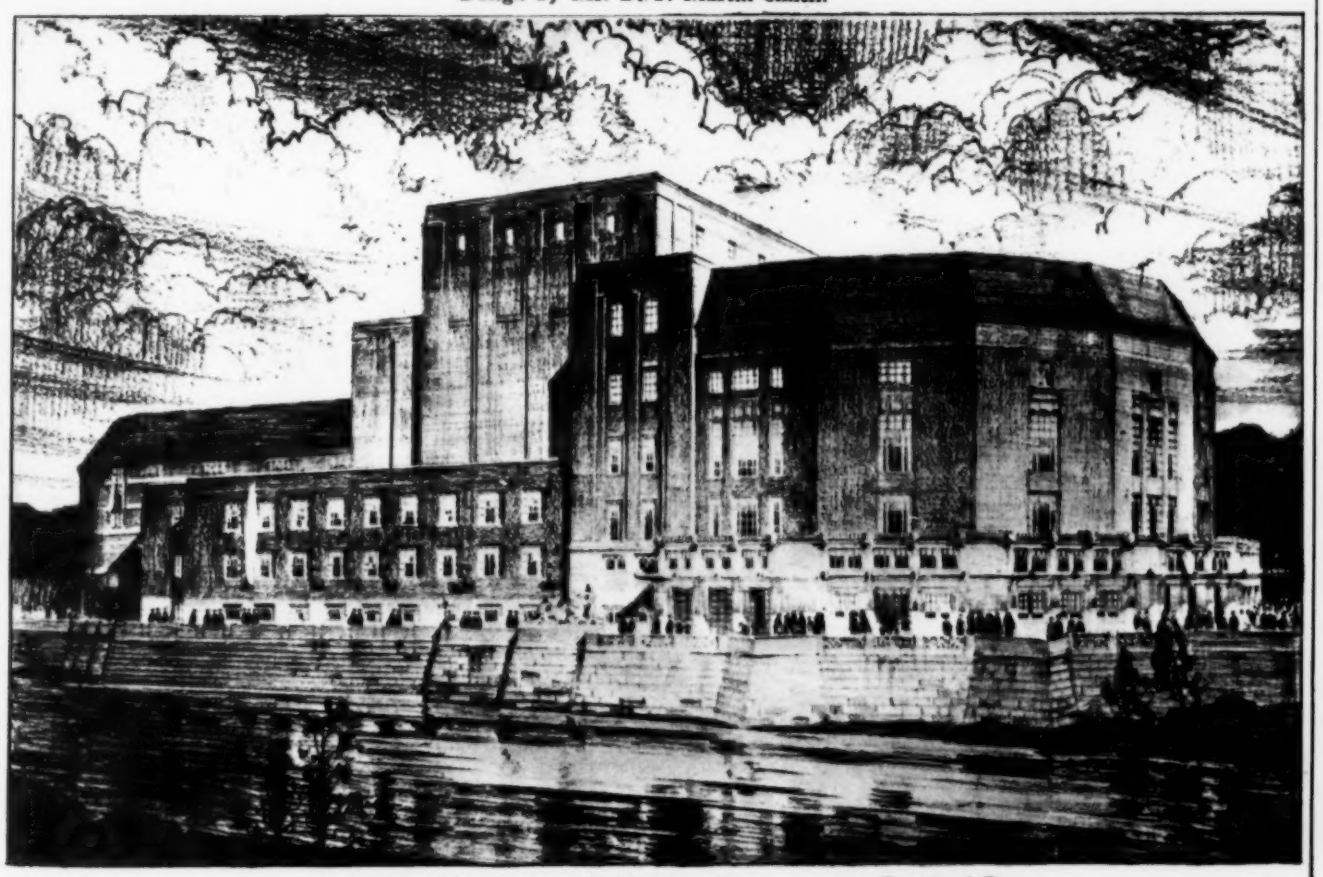
Design by Mr. Albert J. Rousseau.



Design by Messrs. Albert R. Mohr and Benjamin Moscowitz.



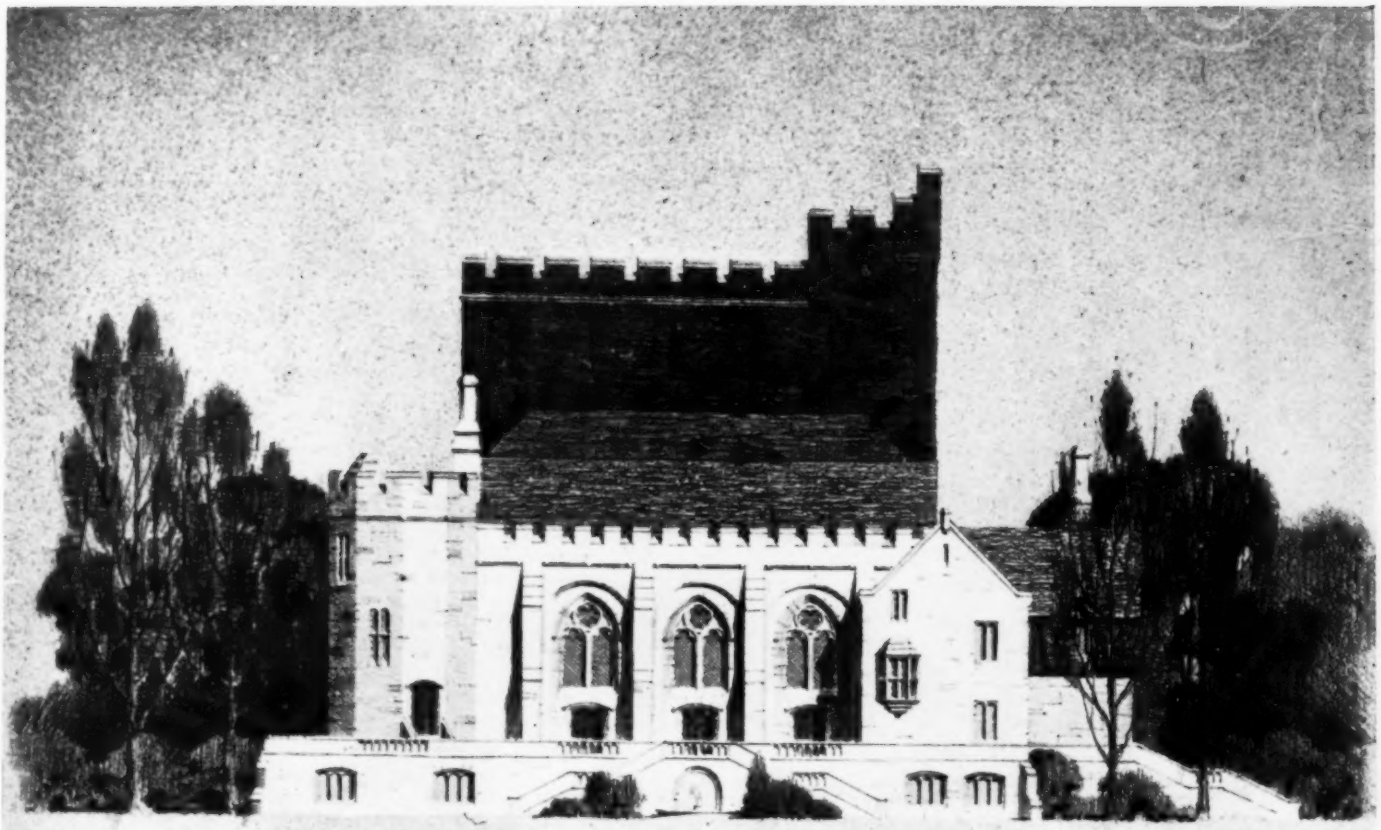
Design by Mr. D. F. Martin-Smith.



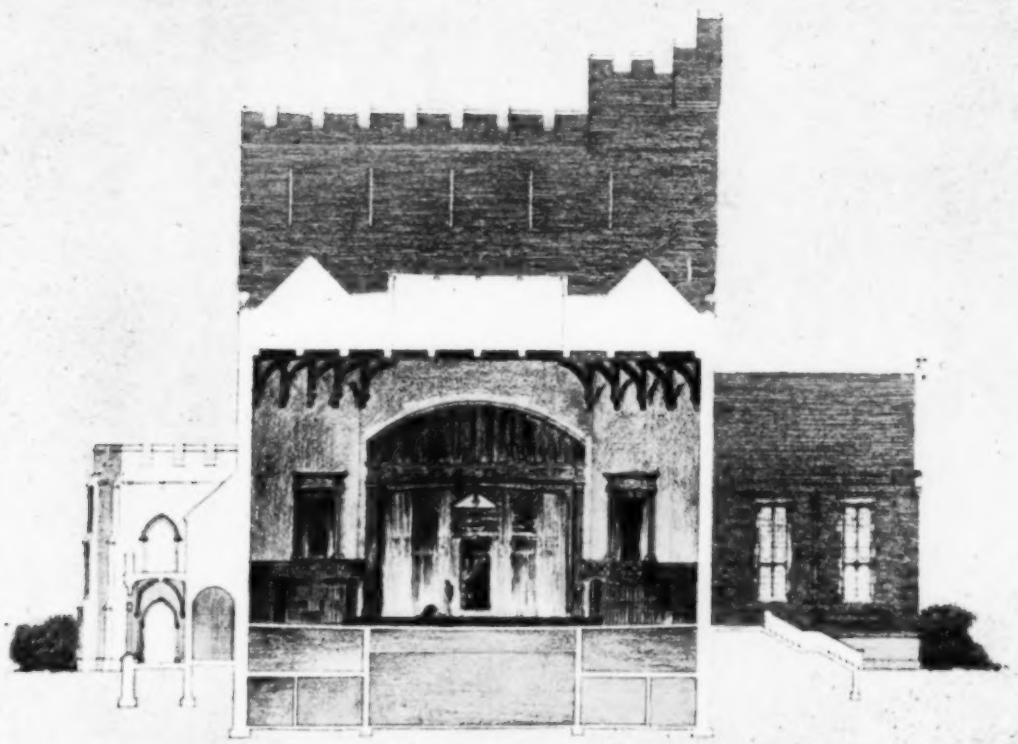
Design by Messrs. Percy Tubbs, Son, Duncan and S. Rowland Pierce.

THEATRE COMPETITION, STRATFORD-ON-AVON.

UNIV. OF MICH.



North Elevation

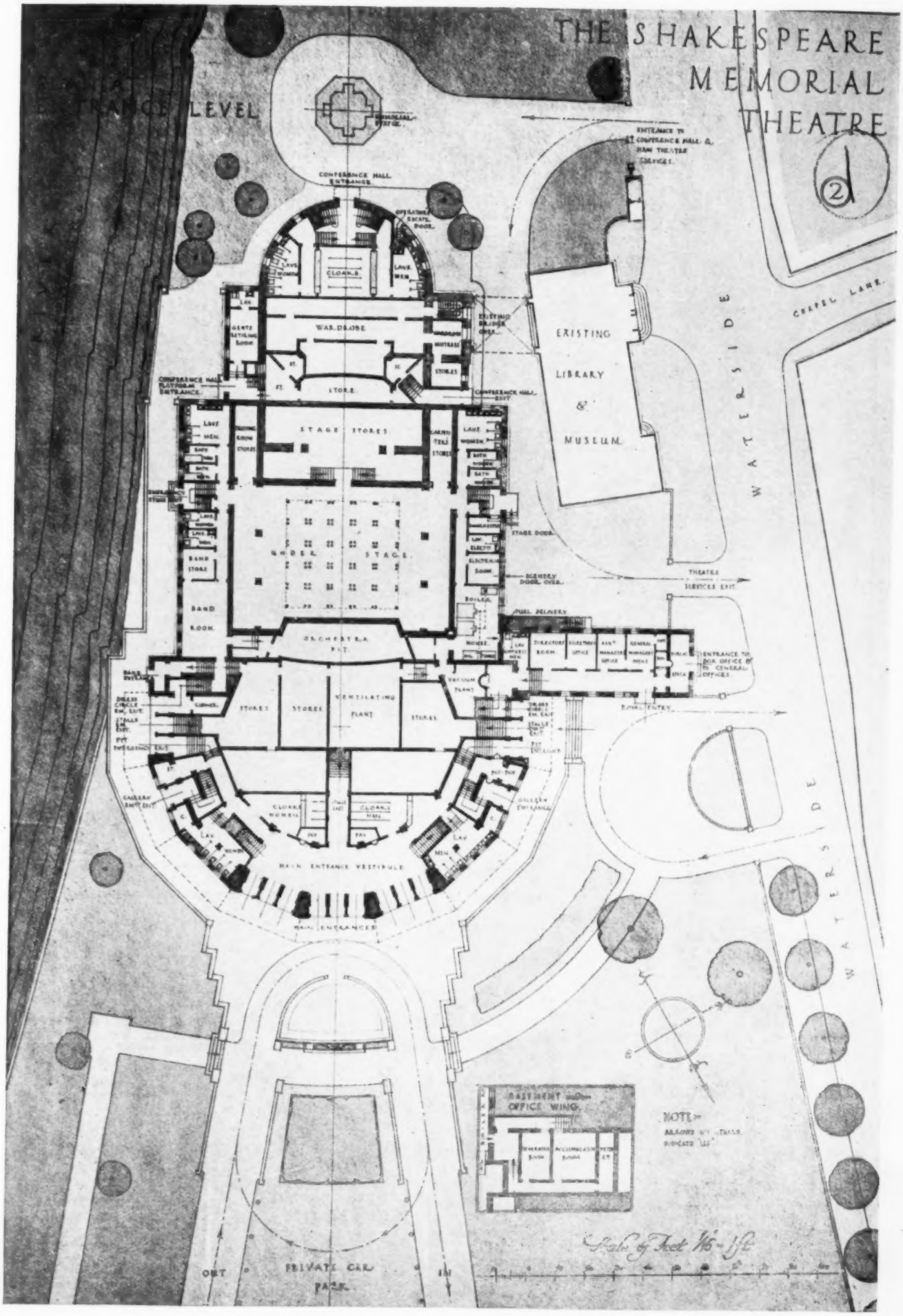


Transverse Section.

Shakespeare Memorial Theatre Competition, Stratford-on-Avon.

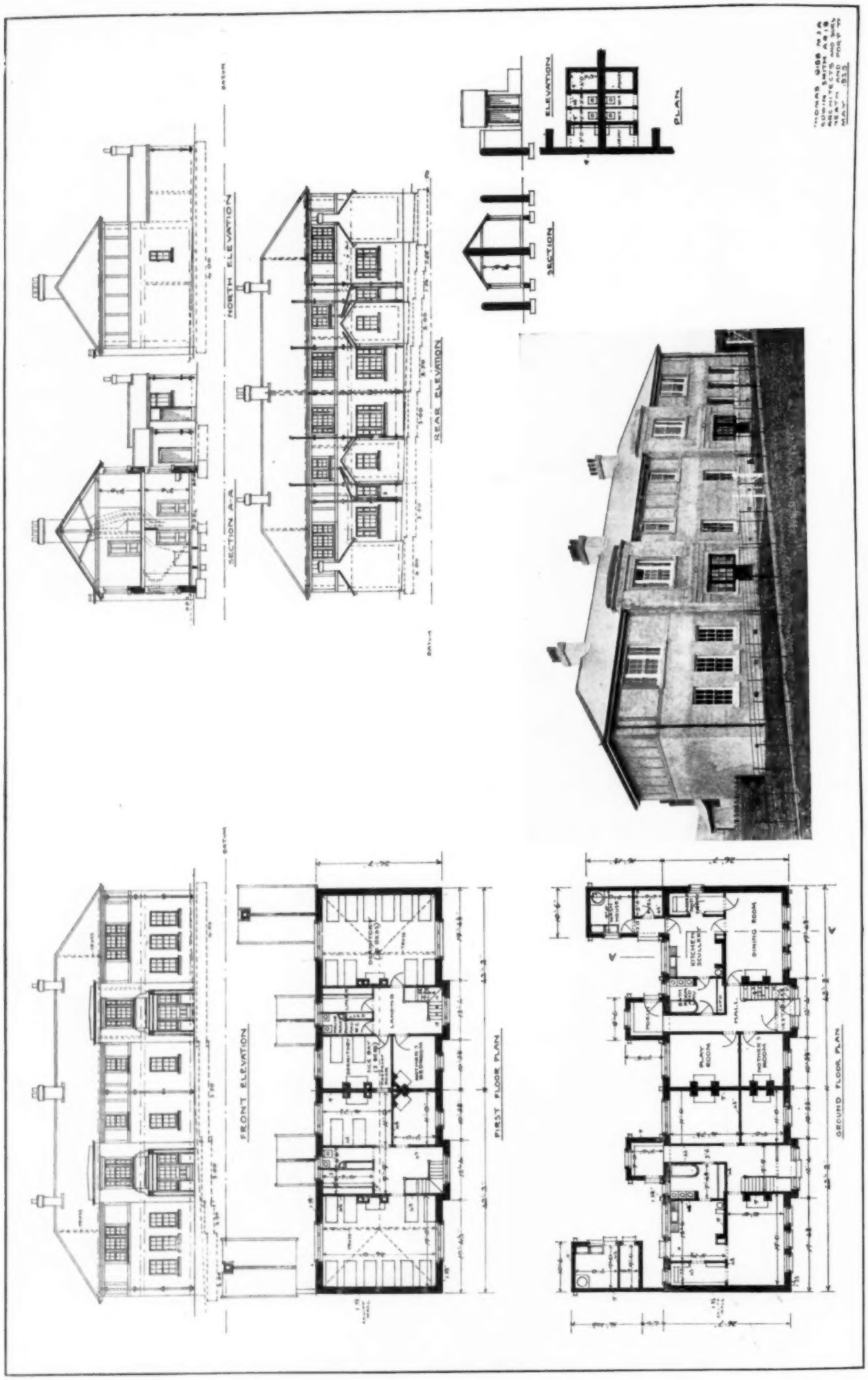
Design submitted by Mr. Robert O. Derrick (America).

UNIV. OF MICH.



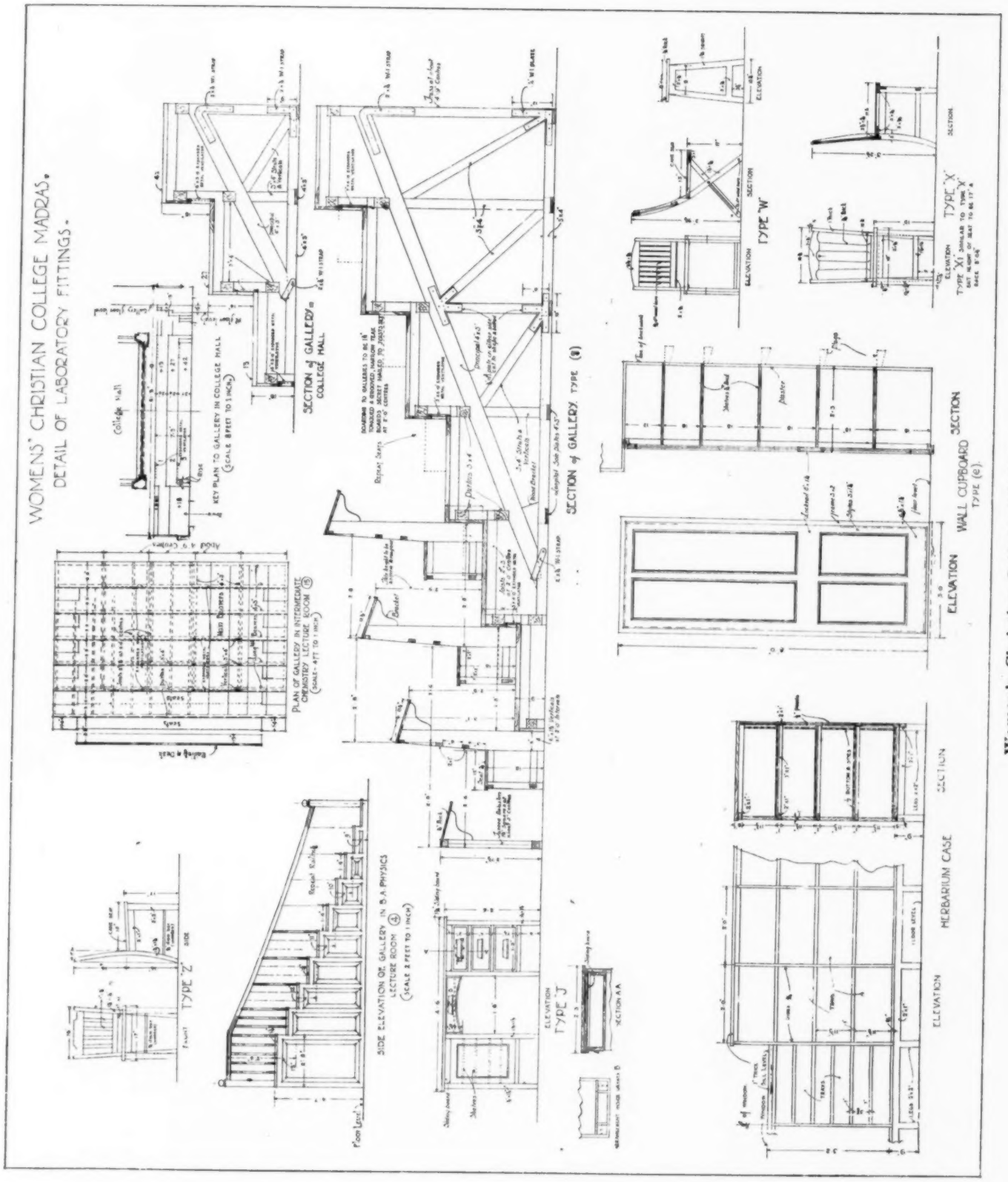
Shakespeare Memorial Theatre Competition, Stratford-on-Avon.

Design submitted by MESSRS. PERCY TUBBS, SON, AND DUNCAN, and S. ROWLAND PIERCE.



Cottage Homes at Bryncoch, Neath.

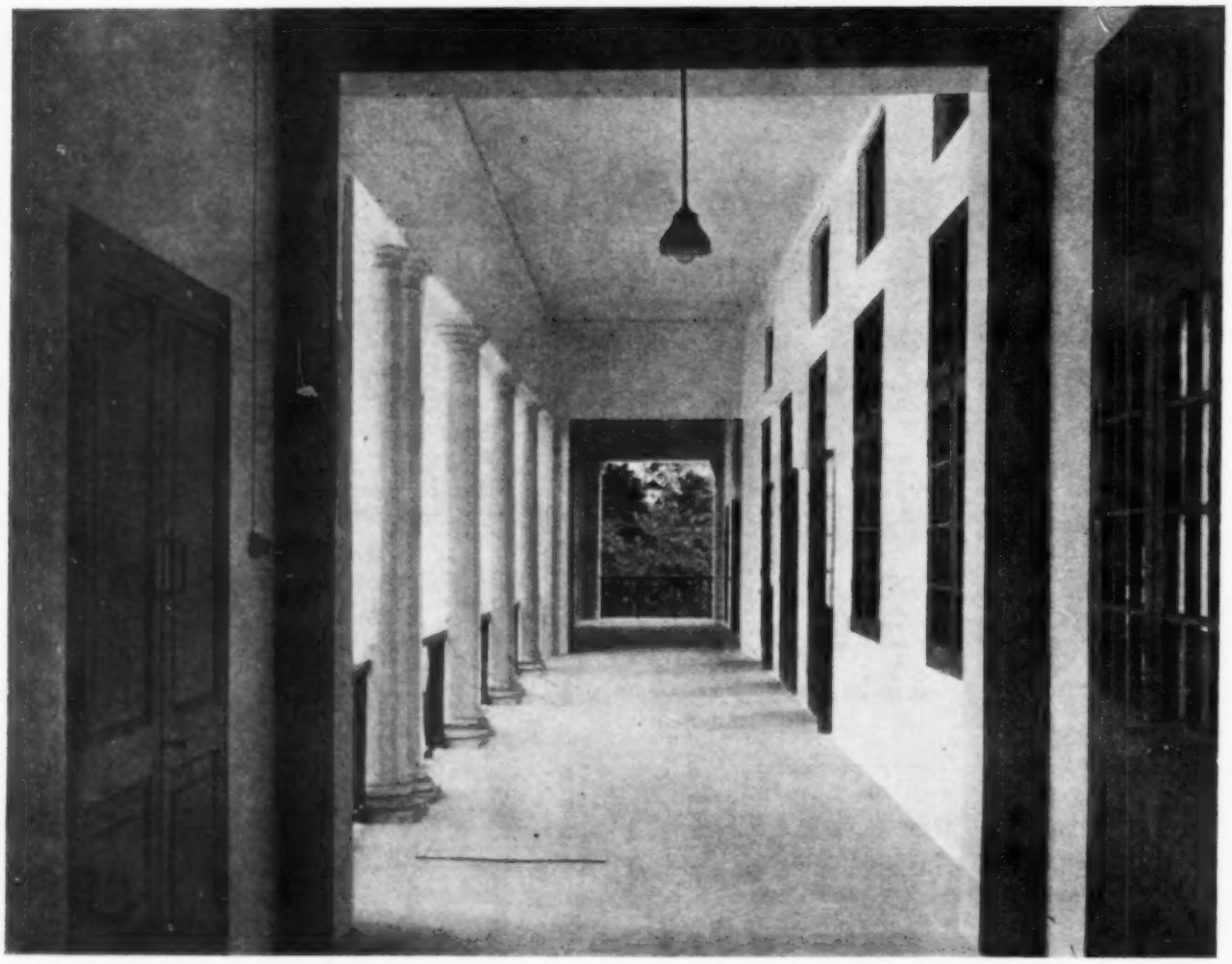
Messrs. Gibbs & Smith, L. and A.R.I.B.A., Architects.


WOMEN'S CHRISTIAN COLLEGE MADRAS.
DETAIL OF LABORATORY FITTINGS.
SECTION of GALLERY in COLLEGE HALL
KEY PLAN TO GALLERY IN COLLEGE HALL (SCALE 8 FEET TO 1 INCH)
PLAN OF GALLERY IN INTERMEDIATE CHEMISTRY LECTURE ROOM (15) (SCALE - 4 FT TO 1 INCH)
SECTION of GALLERY. TYPE (B)
TYPE 'W'
TYPE 'X'
TYPE 'Z'
SIDE ELEVATION OF GALLERY IN B.A. PHYSICS LECTURE ROOM (4) (SCALE 2 FEET TO 1 INCH)
ELEVATION TYPE 'J'
SECTION AA
WALL CUPBOARD TYPE (e).
ELEVATION
SECTION
HERBARIUM CASE

Women's Christian College, Madras.

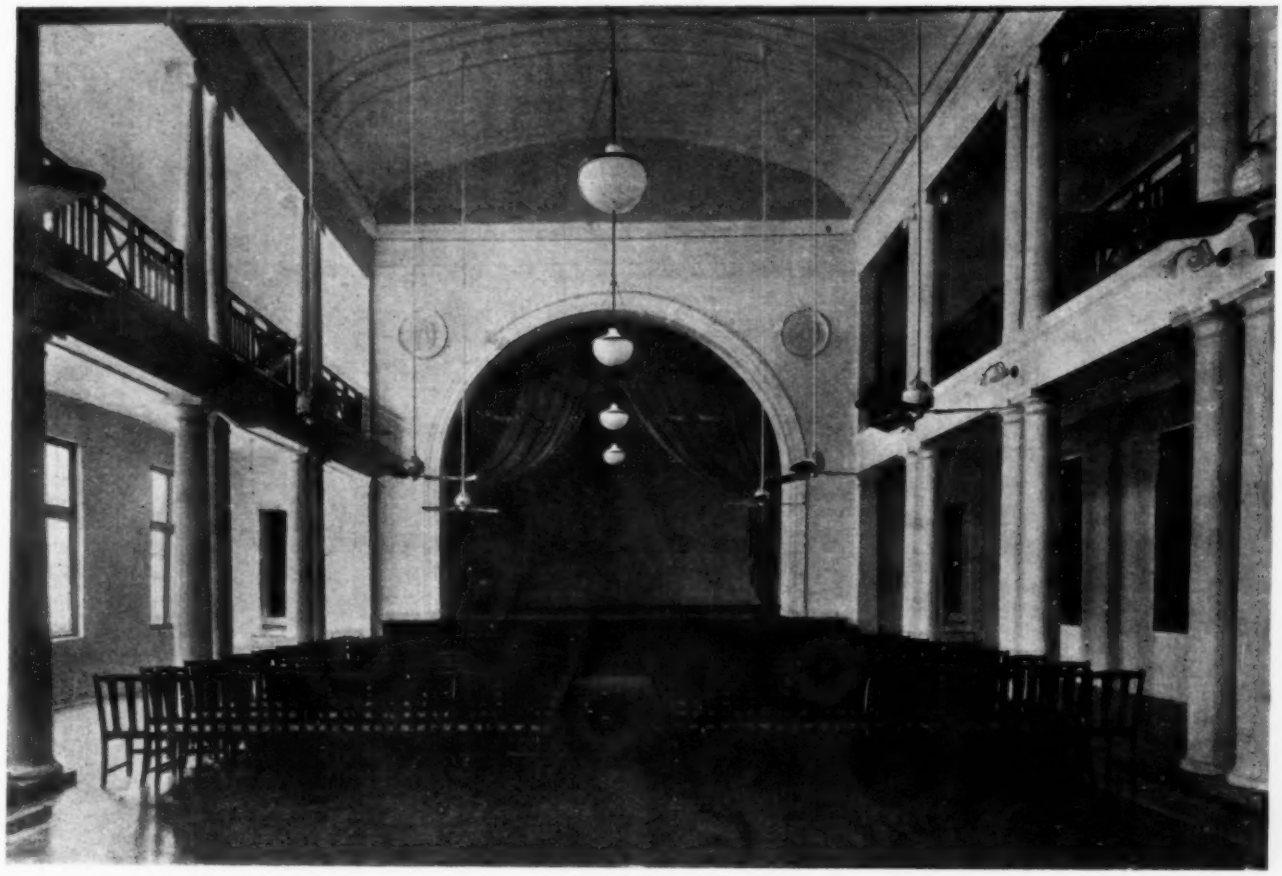
MESSRS. JACKSON & BARKER, Architects.

Main Front.

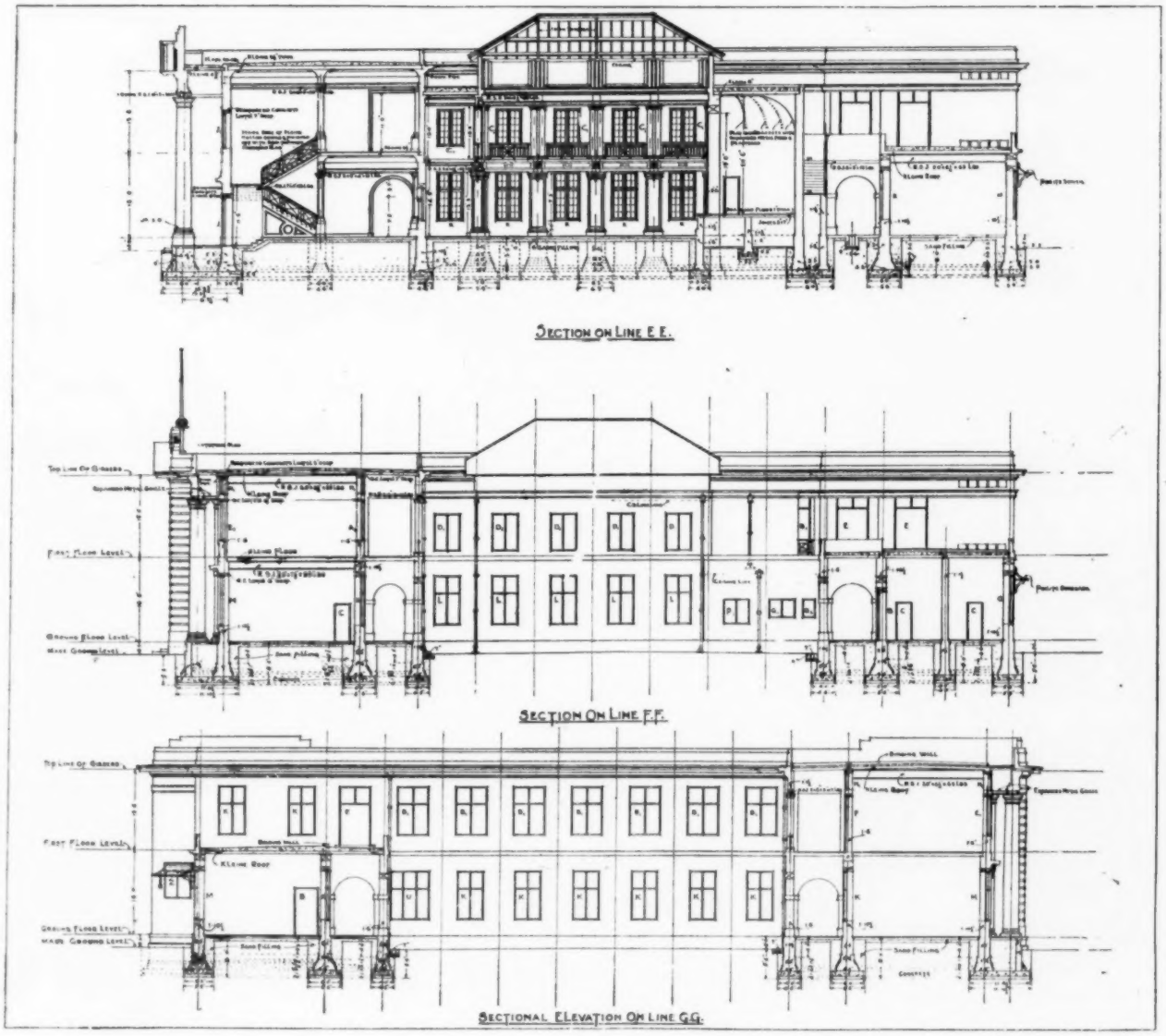


Verandah on First Floor.

Women's Christian College, Madras. Messrs. Jackson & Barker, Architects.

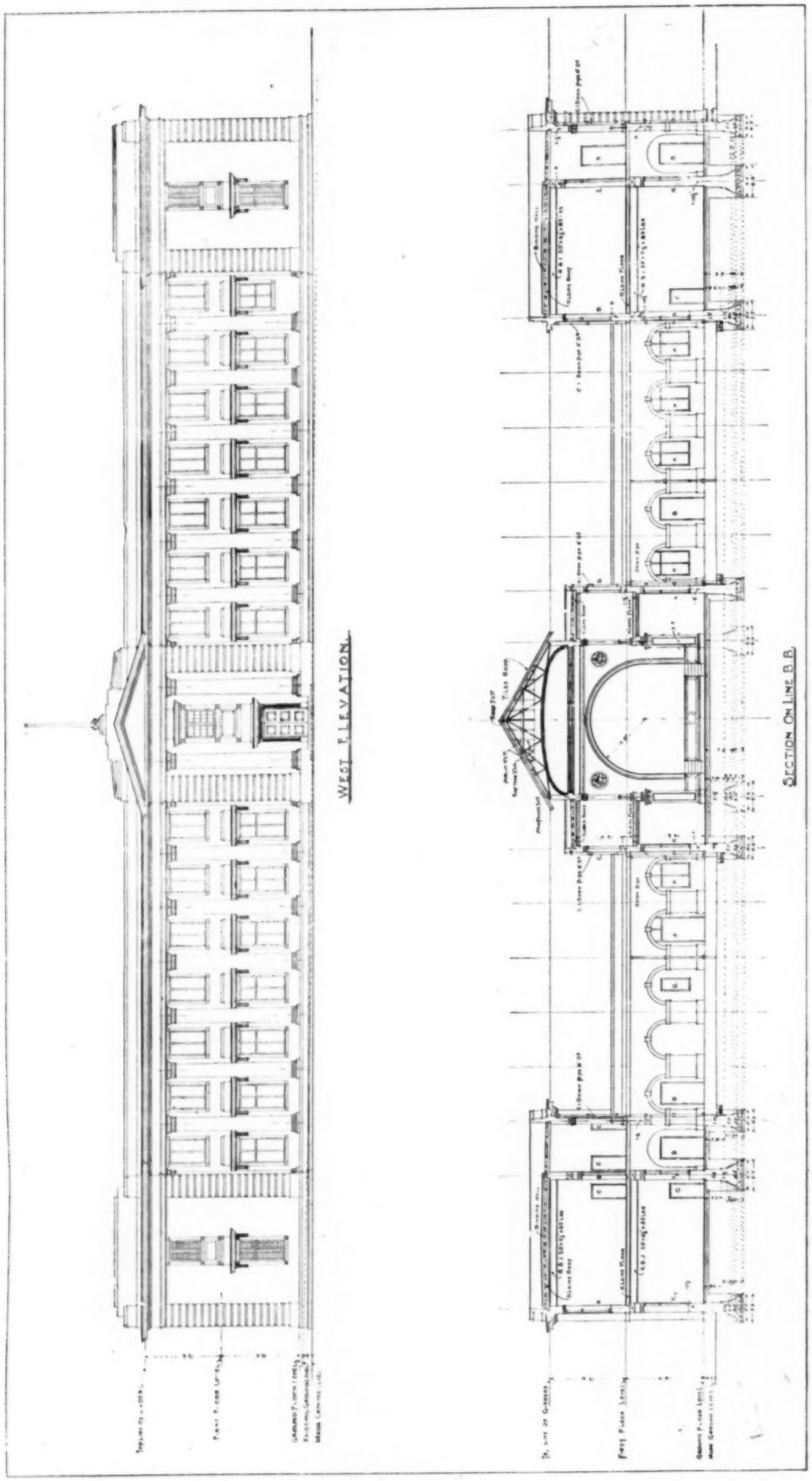


COLLEGE HALL.



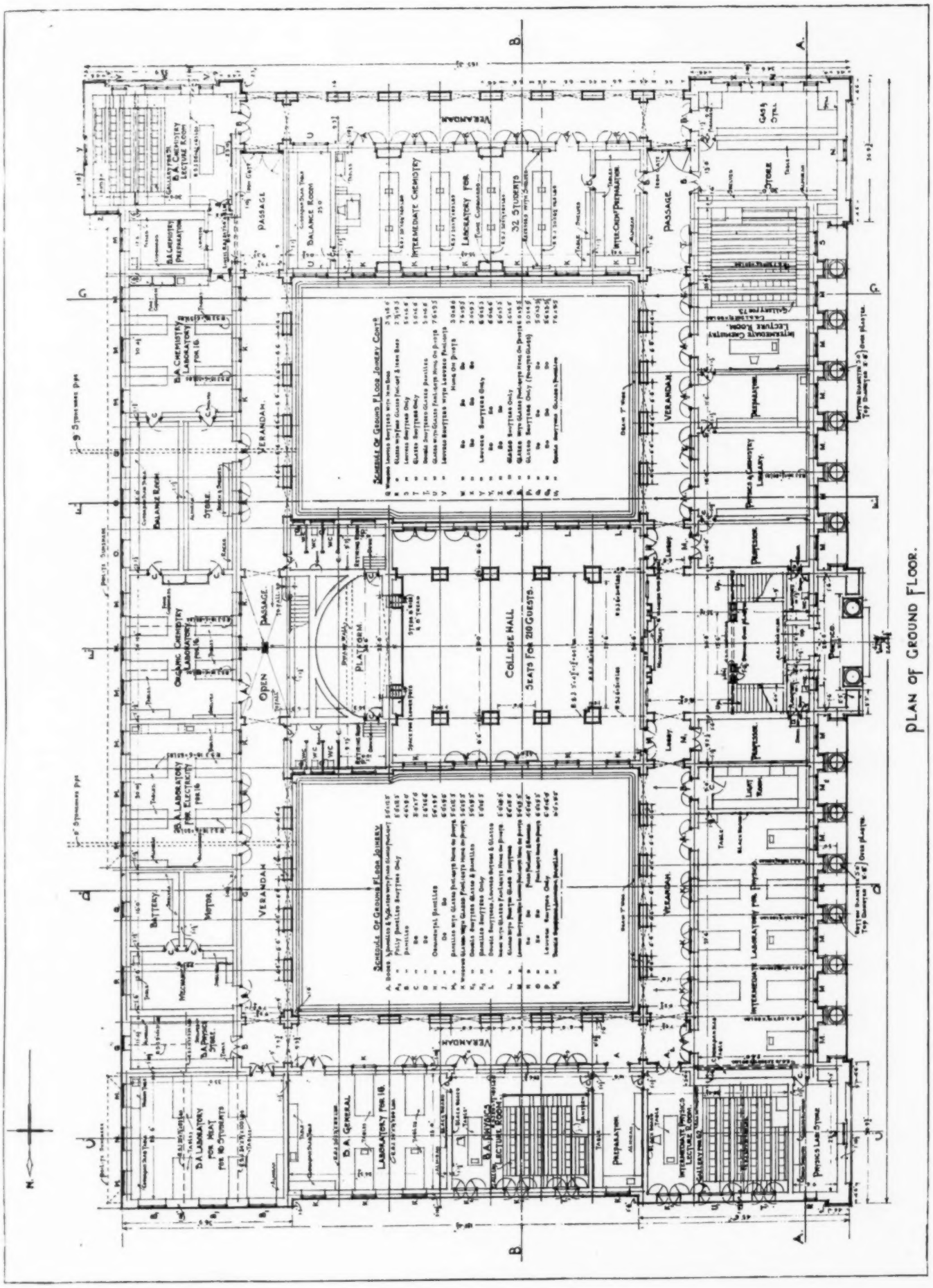
Women's Christian College, Madras.

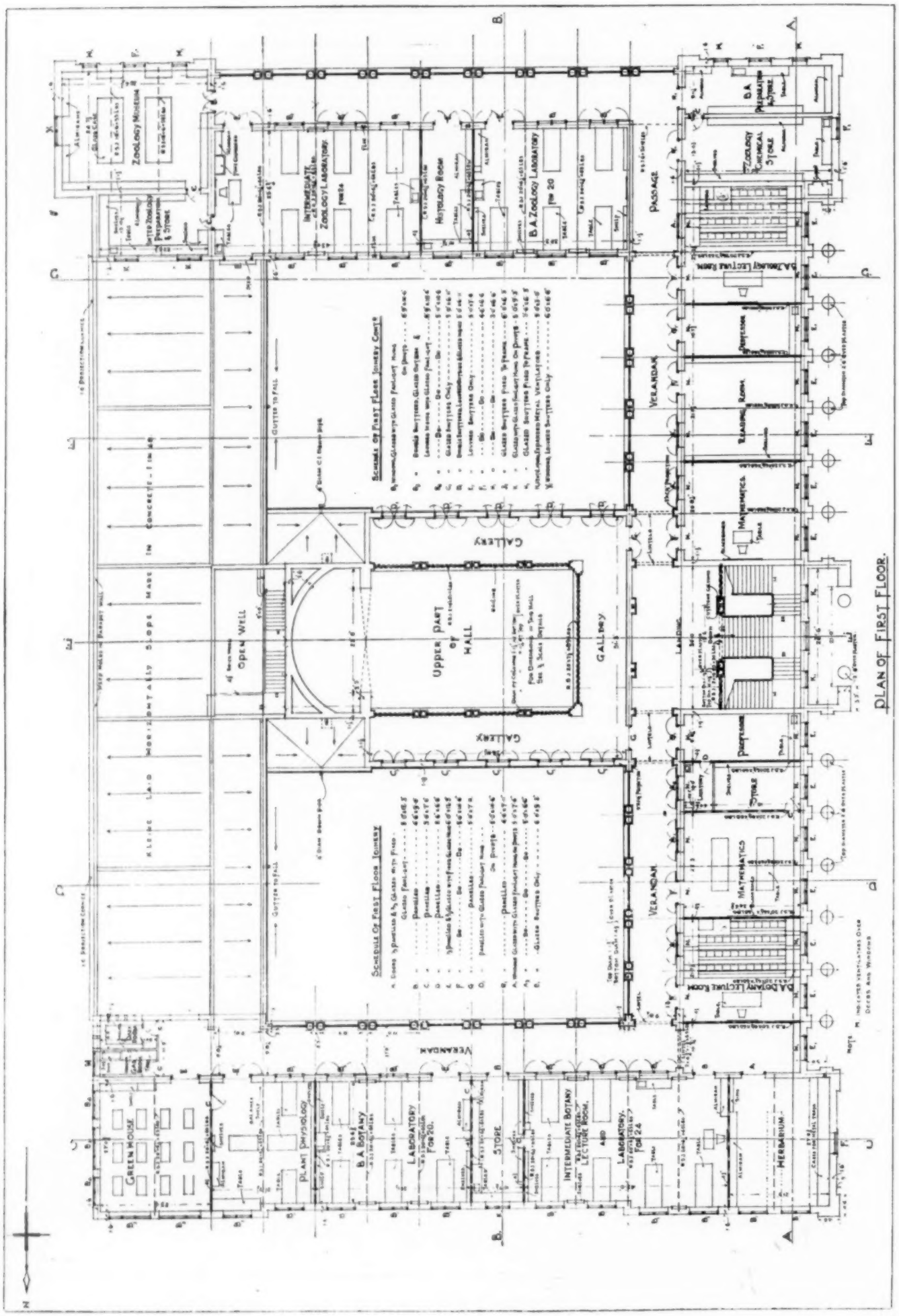
MESSRS. JACKSON & BARKER, Architects.



Women's Christian College, Madras

MESSRS. JACKSON & BARKER, Architects.


PLAN OF GROUND FLOOR.
Women's Christian College, Madras.
MESSRS. JACKSON & BARKER, Architects.



PLAN OF FIRST FLOOR.

Women's Christian College, Madras.

MESSRS. JACKSON & BARKER, Architects.

R.I.B.A.

THE INTERMEDIATE EXAMINATIONS, DECEMBER, 1927.

THE Intermediate Examinations qualifying for election as Student R.I.B.A. were held in London from November 11 to 17, and in Manchester from November 11 to 16. Of the 91 candidates examined, 31 passed and 60 were relegated. The successful candidates are as follows, the names being given in order of merit as placed by the examiners :—

Boon, G. M.
Hartley, J. S.
Walden, R. P.
Vine, C. M.
Parsons, D. W.
Pettit, H. E.
Price, G. L.
Broughton, F. H.
Andrew, L. A. D.
Birkett, A. L.
Bradley, Frank
Cartlidge, W. G.
Clark, A. R.
Fairhurst, R. F.
Fisher, R. C.
Frizzell, F. G.
Gleave, J. L.
Golding, Alfred
Green, H. A.
Kelly, H. L.
Mileson, Harold
Parsons, L. H.
Pickering, C. E.
Powell, A. E.
Proffitt, N. W.
Riley, Harold
Smithson, G. H.
Targett, C. H.
Underhill, Alfred
Walmsley, W. G.
Willis, N. J. S.

R.I.B.A. Examinations.

Following are the dates of the R.I.B.A. Examinations to be held in 1928 :—

Intermediate Examination.—May 11, 12, 14, 15, and 17 (last day for receiving applications April 11). November 9, 10, 12, 13, and 15 (last day for receiving applications October 9).

Final Examination.—July 4, 5, 6, 7, 9, 10, 11, and 12 (last day for receiving applications June 4). December 5, 6, 7, 8, 10, 11, 12, and 13 (last day for receiving applications November 5).

Special Examination.—July 4, 5, 6, 7, 9, and 10 (last day for receiving applications June 4). December 5, 6, 7, 8, 10, and 11 (last day for receiving applications November 5).

Special Examination in Design for former Members of the Society of Architects.—July 4, 5, 6, 7, and 9 (last day for receiving applications June 4). December 5, 6, 7, 8, and 10 (last day for receiving applications November 5).

Special Examination of Licentiates to qualify as Fellows.—April 16, 17, 18, 19, and 20 (last day for receiving applications March 16). November 19, 20, 21, 22, and 23 (last day for receiving applications October 19).

Statutory Examination for the Office of District Surveyor in London and Building Surveyor under Local Authorities.—May 2, 3, and 4 (last day for receiving applications April 11). October 17, 18, and 19 (last day for receiving applications October 1).

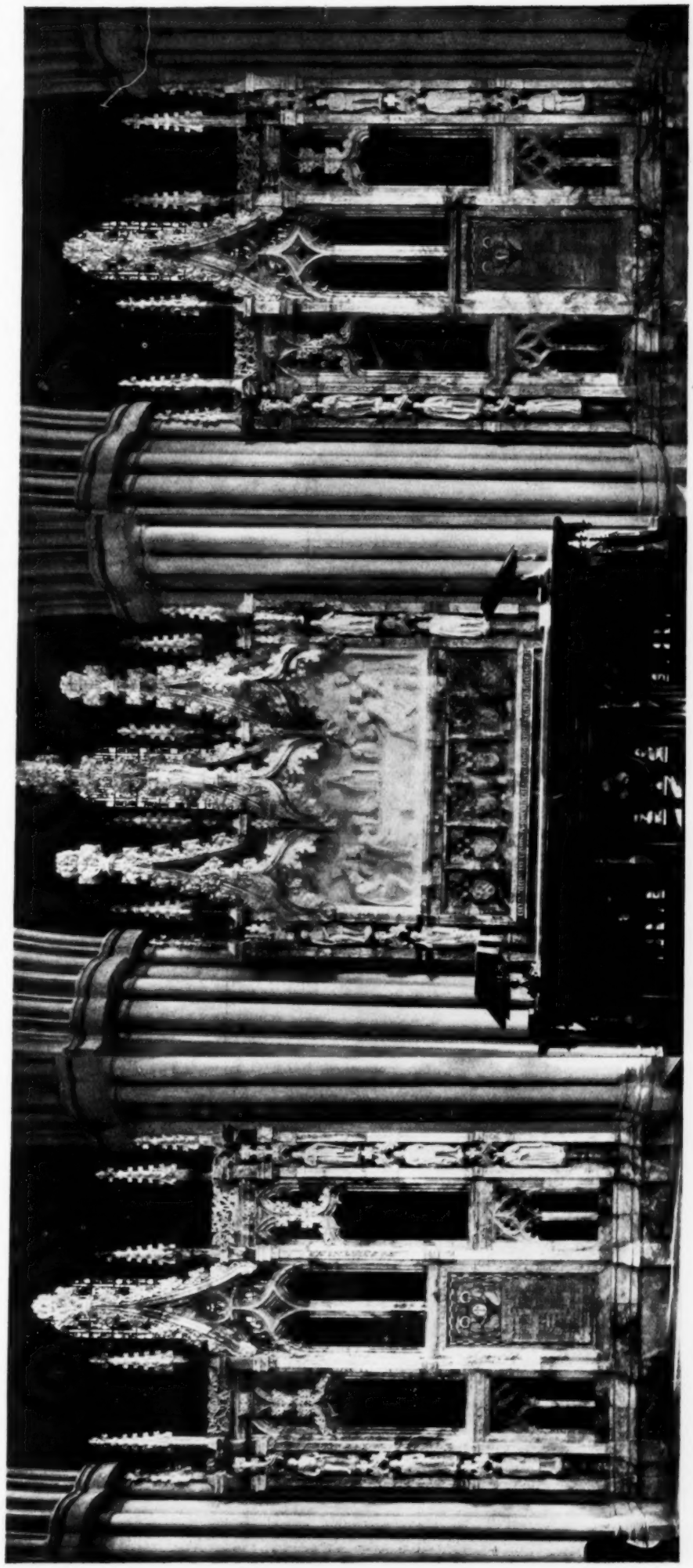
Town-Planning Examination.—June 27, 28, 29, and July 2 (last day for receiving applications March 1).

R.I.B.A. Problems in Design, 1928.

We have received a list of R.I.B.A. Problems in Design for the year ending December 31, 1928. Copies of the list may be obtained free on application at the R.I.B.A.

NEW REREDOS AND SCREEN, ST. PAUL'S, TORONTO, CANADA.

THIS screen, which is in memory of the members of the congregation who laid down their lives in the great war, was designed—in conjunction with Mr. E. J. Lennox, of Toronto—by J. Wippell and Co., of Exeter and London. It is in Derbyshire alabaster, with sculpture carried out in Beer stone. The screen is of three sections, each 11 ft. wide and 20 ft. in height. It is made of over 500 separate pieces, and the cost has been over £3,600. The Beer stone was supplied by the Beer Stone Co., Ltd., of Seaton, Devon. The large block for the centre panel measured 9 ft. 3 in. by 4 ft. 3 in. by 1 ft 9 in., and weighed over 4 tons.



War Memorial Reredos and Screen, St. Paul's, Toronto.
Design made in consultation with MR. E. J. LENNOX, Architect.

THE REPAIR OF ANCIENT BUILDINGS

BY A. R. POWYS, A.R.I.B.A.

Preliminary.

IT is the purpose of these articles to suggest methods, in accordance with the principles of the Society for the Protection of Ancient Buildings, which may be employed in the repair of ancient buildings. There is no need to state these principles here at length; that has been done elsewhere. They are now well known, and are generally accepted. But in spite of a genuine intention to do repair work in accordance with these principles, fine buildings, both Gothic and others, suffer because they are misapplied. I am therefore asked to put on paper technical information on this subject, which has been collected by the Society during the fifty years of its existence, for it was founded as long ago as 1877.

Stated briefly, the object of the repair work with which these articles are concerned is to preserve and give renewed life to fine and old buildings that have been neglected or are decaying, and in so doing to avoid making reproductions to take the place of damaged features or missing parts when this involves the destruction and not the protection of what remains of the original work. Neither is this at all opposed to a warning which Professor Lethaby gave some years ago against making it a principle that "no work *which has to be renewed* should ever be put back in the form it had or in the material it was."

It is my experience that it is well to have this object constantly in mind when at work upon an old building, but at the same time I have found that it is not wise to lay down dogmatic rules, for when they are made one is apt to be confronted with a case where they do not apply. I would therefore suggest to any who wish to understand the deep-seated purposes which are crystallised in the Society's principles and guiding rules, to study works both where they have and where they have not been respected. As examples of the former, I advise that the repair works done by Mr. William Weir, Professor Lethaby, Mr. Harry Redfern and Mr. Bowden be visited. I hope also that the same impulse to repair sanely will be felt to be the constant background of the advice given in these articles.

The articles are intended to be of use to all who have the care of valuable ancient buildings, or who are in any way concerned with their upkeep. The architect may be disappointed that the advice given is not more precise, and the layman may complain that it is too technical. If this is so I would remind the first of these critics that each case must be treated as a separate problem, that he can expect to find nothing in the text of these articles which will completely apply to any actual case. The advice is intended to be helpful in suggesting a right treatment and not as providing dogmatic instructions as to the only way to proceed; and if the layman learns from the following articles that the difficulties are greater and the alternative methods more in number than he had thought, and therefore comes to realise what an infinity of care must be exercised in arranging for and carrying out such works, my two objects will be fulfilled.

The methods of repair discussed in these articles are applicable to all sorts of domestic and church buildings.

I wish to thank all those who have helped me to write these articles with advice and information. They are many. In fact, though the work comes from my pen, my part in it is small; for I have written here as much as I can of the traditional knowledge which the Society for the Protection of Ancient Buildings has inherited and gathered from many different sources. I do not pretend to have set down all that store of knowledge, and it may be that in some matters others would interpret it differently. It seemed, however, desirable that the information *should* be written out and to the best of my ability I have done it. The line drawings which will be reproduced to illustrate the articles are by Mr. J. E. M. Macgregor, A.R.I.B.A., who made them in consultation with me. Mr. Macgregor has had practical experience in carrying out repairs.

General Advice to those in Charge of Ancient Buildings.

Everyone will agree that the first duty of those in charge of fine ancient buildings is to keep them in structural repair. The second is to make sure that suggested alterations are indeed necessary and to see that these are seemly. The purpose of these general remarks is to show how these duties may be performed, so that work may be done with the least alteration to the qualities which make a building worthy of notice, namely, workmanship, form, colour and texture. At the outset, however, it will be well to state that no fixed rule can be set down to be followed invariably. Each case must be considered on its merits. It is also important that repairs to an old building should not be carried out hurriedly. Time should be allowed in which the effect of the repair of each section may be fully realised. It is not intended that works of repair should follow the order in which they are described in these articles. The structure, however, should always be made sound before attention is turned to decorative features or fittings.

Those responsible for the treatment of an ancient building, realising that the contemplated work demands qualifications beyond their knowledge, will doubtless seek advice from an architect. It may be thought that, having done this, their only remaining duties are to procure the necessary funds and to enter into a building contract so that for a fixed sum the recommendations may be carried into effect. Yet, as can be seen in many an ancient building, which has been dealt with under these conditions, such a course does not necessarily secure a building from harm.

Perhaps no branch of architecture calls for more highly specialised qualifications in all concerned than does that which has to do with the treatment of ancient buildings. The questions which have to be dealt with are of a most intricate nature, always involving the consideration of the twin needs of structural stability and of conservation, and sometimes also the making of alterations. In the course of work on an ancient building points difficult to decide and needing instant decision constantly arise. What needs renewal, how much may be retained, what technical method should be employed and like questions confront one at every turn.

Choice of an Architect, Supervision and Workmen.

In view of these as well as of other considerations, the conclusion reached by the Society for the Protection of Ancient Buildings deserves close attention. That body holds that the ordinary methods of supervising works on ancient buildings seldom lead to the best results. It is essential that the choice of an architect should be most carefully made. He should be chosen for one reason alone, namely, that he has shown by actual work that he can repair an old building without doing it harm or causing it to lose its value. Further, works of repair demand the constant personal supervision of a competent directing head. The appreciation of the merit of ancient workmanship and its value as an archæological record is beyond the capacity of the ordinary clerk of works, although his knowledge of modern building operations may be complete. Success depends on the actual handling of materials, and few workmen have the training and experience which enables them to act with certainty in these matters. It has been found, therefore, that if repair work is to be well done, either of two conditions must be observed: (1) The architect himself or else a competent, trained assistant should always be at hand whilst work is going on; or (2) the working foreman in charge and the men he controls must be highly intelligent and must have been trained in a tradition of sane repair, such as that provided by the Society for the Protection of Ancient Buildings or by the Ancient Monuments Department of H.M.O.W.

It cannot be too strongly urged that much more depends on the skill of the workmen who actually do the work than in building anew. If men, not specially trained, go ahead without waiting for detailed instructions, they may easily do irreparable mischief to ancient work, which by skilled treatment may be retained: if they have constantly to pause for instructions, they are apt to waste time and become careless, and in the end, even if the work is successful, the cost will be increased in proportion. The men employed, then, should have so true an instinct for the right treatment of materials as to deserve the title of artist as well as that of mechanic. Many tradesmen, bricklayers, masons, carpenters and others, have it in them to work in this way, but owing to modern conditions of labour, and the fact that they work under many different architects who may have as many different conventions, they are apt to lose interest and our ancient buildings suffer. Until a single sane tradition takes the place of fancy conventions, repair work cannot be done well without the special precautions which are recommended here.

The choice of a builder, if one is employed, has also an effect on the work, though this is less so than it was in the past, for builders tend more and more to become little else than financial agents.

In a word the success of the work depends on the men who do it. I write from experience; working from a London office, it is sometimes difficult to arrange to visit a building in the country more than once in a fortnight, and unless the men employed have the training described above this is not enough. In these circumstances, if an architect succeeds it is because fortune gives him workmen who know their job.

Contracts; Lump-sum, or other.

A further point is that the execution of the work by a lump-sum contract is not in the interests of the employer, of the architect or of the builder. Work in ancient buildings is speculative. The builder, if he be asked to do the work for a lump-sum, gives a price which he considers will cover him against possible loss. But, if the work should prove unexpectedly difficult, he is faced with the alternatives either of doing work at a loss to himself and to his shareholders, or doing only as much work as he can without placing himself in this predicament, less in fact, than he knows *should* be done. Again, it is easier to estimate for putting in entirely new work than for making repairs to the old. It is a fact that under the lump-sum contract, the tendency is for old work to disappear. The undesirable features of working under a lump-sum contract may be eliminated if the work is done under "a schedule of prices" contract, or by the direct employment of labour and the purchase of materials by the owner through an architect acting as his agent. In both these cases payment is in actual accord with the work done.

Work carried out under "labour and material" contracts competently supervised, far from being more costly as is sometimes thought, tends to be less expensive than work done under a lump-sum contract in the manner customary for new buildings. Indeed, it is the method most to be recommended.

BOOK REVIEWS

Life in Regency and Early Victorian Times. An Account of the Days of Brummell and D'Orsay, 1800 to 1850. By E. BERESFORD CHANCELLOR, M.A., F.S.A. (London: B. T. Batsford.) Price 25s. net.

This delightful book may be said to be supplementary to the author's equally interesting work on "The Eighteenth Century in London," in which he gave an excellent account of the architectural development and social life of London from 1700 to 1800. In the present volume the author describes the social and artistic activities of the first 50 years of last century—the period of transition between the somewhat leisurely conditions of the eighteenth century and those with which we are more or less familiar to-day. The period is full of interest, and the author knows how to describe it in easy narrative form and with many appropriate observations and comments. In no other period in our history, probably, were there so many outstanding figures or the social life so rapidly changed. The fashionable life falls into two divisions: that with Brummell and the Prince Regent as its arbiters; and that in which D'Orsay and Lady Blessington held sway. The life of Carlton House and Brighton, where men combined the foppery of a Brummell with the mannerisms of a stage-coachman, is vividly recorded, as well as the clubs and gaming-houses, *salons* and pleasure-gardens, race-meetings, prize fights, coffee-houses and taverns. The years that followed brought forth a new generation of more general delicacy, and amongst those who swarmed in Lady Blessington's *salons* at Gore House, we can find such names as Dickens, Thackeray, Lytton, Scott, Disraeli; while culture and accomplishment became one of the greatest assets to a man of fashion. This was an age of even greater contrasts than the eighteenth century, and we are given a graphic description of the lives of the poor and of the intermediate middle-class that was so rapidly on the increase. Again the Arts, Crafts and Buildings of the period receive a detailed treatment, and many illustrations are given of architecture, pictures, furniture, sculpture, etc.; while such branches of art as the Theatre, Music and Literature are, of course, included. The illustrations, numbering about 150, form an appropriate pictorial record of these years. The volume will, in short, be found to recreate the life of Regency and Early Victorian times; and its wealth of illustrations and beautiful presentation should recommend it to a permanent place on the shelves of every library.

Mexican Architecture of the Vice-Regal Period. By WALTER H. KILHAM, S.B., F.A.I.A. (New York and London: Longmans, Green & Co.) 221 pp. 8vo. 21s. nett.

Old Mexico is, as Professor Ralph Adams Cram has said, a veritable storehouse of "unfamiliar and curiously beautiful architectural jewels." The strict purist in styles would be shocked at the over-elaboration in ornamentation. It is well to remember that when Cortés subjugated the Aztecs, he not only imposed his sovereign lord upon them, but also that sovereign's religion and the architecture of Old Spain to boot. The Indians, born craftsmen, were industrious and amenable pupils who bettered their tutors, and the results in ornamentation often beggar description.

It would be impossible in a short notice even to summarise the multifarious styles of architecture in Mexico; but during this Vice-regal period, 1521 to 1821, we find a reflection and generally an elaboration of everything found in old Spain, with the exception of the Gothic. The mind reels at the thought of a possible development on Gothic lines. This is not to say that all ornament in Mexico is over-elaborate; there are hundreds of examples in civil and ecclesiastical architecture which prove the contrary in pure and graceful lines and proportions, and even great reticence in adornment. The Spanish Americans were particularly happy in their treatment of the Moresque dome, which always looks native to the soil.

This book gives, in 34 pages of text, a clear outline of the interesting development of the Hispano-Moresque and Renaissance in old Mexico under the brains and hands of the Spanish invaders and their Indian artificers. The remainder of the volume consists of 84 plates with short descriptive texts, and, whilst admitting distinct value in the majority of his appreciations, we think the author is sometimes over-eulogistic; as a special pleader he occasionally loses sense of proportion.

Colour predominates in Mexican architecture—infinitely more so than in the European schools. We see this largely in the tile treatment of the domestic architecture. The House of Tiles in Mexico City, for its plateresque, all-over ornamentation in blue, white and yellow, must be worth going the whole distance to see.

DIARIES AND CALENDARS, 1928.

"The Builder" Diary.

"The Architects' and Surveyors' Pocket Diary" has again been issued by *The Builder*, being a pocket diary eminently suitable for the use of the architectural, surveying and allied professions. It contains a generous diary space, while a supply of squared paper is also bound in. There is a section devoted to technical data and information, while in addition there is a short memorandum on each of the governing bodies of the several professions. The diary, in short, is comprehensive yet neat, and fills a very definite requirement.

The A.A. Year Book and Diary.

This Year Book and Diary for 1928 fully maintains its reputation for attractive effectiveness. Of handy size, it has the merit of having ample space for diary and notes, while a large section is devoted to architectural and other data, scales of charges, constants, etc. In addition, there is a large section given over to the rules and social activities of the "A.A."

Messrs. Charles Letts and Co.

Messrs. Charles Letts and Co.—the popularity of whose diaries is clearly demonstrated by the fact that the sale for 1927 well exceeded the two million mark—have issued for this year a number of very attractive diaries of all styles, for all purposes. For personal use, there are many types at all prices, from one shilling upwards, many being fitted with the self-opening "Printatoe" tablet, and carrying a free insurance coupon. For office and home requirements, there are scores of calendars and office diaries of all kinds, of which, perhaps, the ever-welcome "Scribbling Diary" is the most useful.

Other Diaries.

We acknowledge with thanks the receipt of calendars or diaries from the following: "Ironmonger" Diary and Hardware Buyers' Guide, 1928; Humphreys, Ltd.; Ringmer Building Works; R. G. Spiller, of Chard, Sherborne and Taunton; Surveyors' Tables and Diary; Joseph Freeman, Sons, and Co., Ltd.; Marlborough's Plain Calendar; Tunnel Portland Cement Co., Ltd.; Cayless Bros. (Battersea); Ashwell and Nesbit, Ltd.; W. W. Sprague and Co., Ltd.; Edwd. Deane and Beal, Ltd.; Rd. Johnson, Clapham and Morris, Ltd.; Ironite Co., Ltd.; John and Edward Wright; Ragusa Asphalte Co., Ltd.; Pinchin, Johnson & Co., Ltd.; "Sentry" Boilers; Callender's Cable Construction Co., Ltd.; C. Townsend, Hook & Co., Ltd.; Strand Engraving Co., Ltd.; Lewis E. Nunn; C. F. Hodgson & Son, Ltd.; Paper Sacks, Ltd.; Edward Wood & Co., Ltd.; Hibberd Brothers, Ltd.; Midland Joinery Works, Ltd.; Wellington Printers, Ltd.; Dorman Long & Co., Ltd.; and R. Cook & Sons, Ltd.

THE LEAGUE OF NATIONS' BUILDING

A NEW YEAR'S AUGURY.

By ISIS.

THE decision of the judges as to the choice of the design for the League Building awakens many thoughts. What opportunity does such a building hold out for architecture? What should we expect it to include? The announcement, coming as it does when a new year is opening with all its hopes and fears, encourages us to attempt to visualise what a building representing so great an object should present for us. A good deal has been said about the plan of the building, as being something for which there is no precedent, the nature of which is still undetermined. For its purport is something more than the housing of the Assembly and the Secretariat, and we should expect to find a connection between the building and the aims to forward which it is being erected. Is there any parallel in the impulses moving us to-day to the passionate convictions that went to the building of a Rheims Cathedral?

We are told that the difficulty lies in the architects being asked to produce a building which shall express the ideas of the League, ideas which are not yet embodied in any tradition of building. But we may easily make too much of the absence of precedent and tradition, even if there is any truth in it at all, a point which we think was laboured unnecessarily in a recent article in a contemporary. For, really, the building is not so much to embody new ideas as to give greater reality and meaning to old ones—to, in fact, the eternal ones, interpreting in terms of greater reality the relationships of human life as between the nations.

Architecture, noblest of arts, is called upon in this building to present us the vesture, the witness of the dawning hopes of a new epoch, to embrace in its forms all that can contribute to this—and the architect cannot do it alone nor any number of architects. There must needs be the correspondence of many minds in corporate activity together. For though the advantage of a number of architects as proposed is very doubtful, the number and strength of the council conjoined to the undertaking is of paramount importance. Sir J. W. Simpson, in his letter to the *Times*, refers to the Louvre and how a painter, a sculptor, "Le Vau, in combination with Perrault, the doctor, and the artist, Le Brun," were invited to collaborate. A council formed in some such way, and enlarged to draw in painters, sculptors and craftsmen is fundamental to such an undertaking, if we are thinking of it in terms of the Cathedral at Rheims and away from the traditions of our economic servitude. Otherwise, the building will droop—come out more the likeness of the latter than of the new thoughts and convictions which are moving in our hearts to-day. For it is only the deed which speaks. Ideals are easy until we act on them and endeavour to give them form. Such a building, therefore, requires the convictions of the nations behind it, and unless there is this national impulse behind the undertaking it will prove the burial of our hopes, rather than the glorious witness of them.

And there is yet time for more counsel as to the manner and design of the building. The international jury did not complete its work, but only began it when it chose the plan prepared jointly by M. Nenot, of Paris, and M. Flegenheimer, of Geneva, and those who are to collaborate with them. Nor is it enough that it should be left to the architects alone. The necessity for vision and vital craftsmanship calls for a more corporate endeavour in which others—sculptor, painter, craftsman—confer, before decisions are made, so that a corporate expression of the needs may fortify the results. We have seen the inadequacy of one-man architecture, with all respect for the efforts made, to give more than efficiency, which

poetry and romance surpass. The established routine of architecture in recent years has hardly included any such qualities, because the artist is so seldom seen in it.

The aims of the League suggest to us a better outlook in which there is found within the arts a more corporate relationship, as we hope for it also between the nations. The approved design for the building appeals feebly whatever its utilitarian merits of plan, because of its lack of vision beyond just the fashion of the time, and the exigencies of steel construction. But there is no reason why the general acceptance of the plan should prevent additions to the romance and inspiration of its forms, and there is no reason why this should not be added to it. Nor will the League Building adequately represent what we are feeling, without taking the further steps to draw its resources from a wider field than that of one profession. But the advantage of a more corporate effort is not enough in itself without the belief behind it. How, then, should we symbolise these closer federated relationships of nations for which the building stands? So far only can we do so, as they are held not vaguely, but as the reality which we aim to achieve.

And what, after all, do we mean by "embodying the ideas of the League"? And why is it all so vague to us? The ideas are as old as the world. In regard to the form of the building, we do not write as forecast- any symbolic meaning, but what is in [illegible] power is to see that the method of its [illegible] shall not be denied all the resources out of which a noble building is born. How it should express the League will be best found in its being raised in the right way.

We shall not reach what we hope to grasp, but the issue lies in trying to reach something of it. Something there is beyond anything we have yet known, for experience lies in front of us, as well as behind, and it is this new experience we must employ if the League Building is to give noble witness of it. Let the new building be our witness that we intend to take the great adventure. For architecture and the arts it is a moment of destiny. What will they make of this great opportunity?

And the particular importance of the League Building lies not in what it is going to cost, but in what it is going to include. Everything becomes glorified by art, and if it is to stand for the ideals of the new epoch it will include beauty, not as before and in comparison with existing buildings, but as expressing itself. In this sense it should be a new building, and express its own tradition, creative rather than derived. And the long colonnade, and the excessive and unrelieved horizontality are only too obvious limitations. In any case, it is not the planning only that will constitute its best virtue. There is nothing specially different in its requirements from much that has gone before, or why we should talk so much of planning as though it were the whole of architecture, no more than we should assume craftsmanship to be the whole of art. Something there is which comes off when these are all passed and the spirit is liberated, and it is the heart of the artist which sets the seal of greatness on a building and is its ultimate claim to immortality. Neither place, nor craftsmanship, though implied in it, are enough for a work of art, and the architecture of the new epoch has to ally itself again to divine sources for its strength and to believe in their inspiration. We need not then waste any time over the symbolism of the building, for that will happen of itself.

Surveyor of the King's Pictures.

The King has appointed Mr. Charles Henry Collins Baker to be Surveyor of His Majesty's Pictures, in place of Sir Lionel Cust, who has resigned, and Sir Cecil Harcourt-Smith, lately Adviser for the Royal Art Collections, to be Surveyor of His Majesty's Works of Art, in place of Sir Lionel Cust, who has resigned.

THE PLANNING OF SECONDARY SCHOOLS

MR. TALIESIN REES, F.R.I.B.A., in the course of a lecture on this subject delivered on January 5 at the Educational Association Conference at University College, W.C., said that the first thing to be considered was the site; he would plead with all authorities to admit an architect into their confidence and deliberations regarding the choice of a site. The rule was that an authority first purchased or acquired a site and then consulted an architect. The right procedure, the lecturer submitted, was to select, where possible, alternative sites, and allow an architect to study the problem and to advise as to the most suitable site, taking into consideration accommodation and cost.

When the site was finally settled, an architect had then to settle firstly, if it was to be a single story or a two story school or partly one and partly two story. The lecturer himself favoured one story for all ordinary class-rooms, and a secondary story on which all special subjects such as chemistry, physics, cookery, music and art were taught. For this there was a very good reason. If the class-rooms were only one story, the second story should be placed over what might be termed the administrative portion of the building, i.e., entrances, cloak-rooms, teachers' rooms, etc. This would mean a saving in cost, as the administrative rooms need not be so high, floor to ceiling, as class-rooms. Therefore one saved in brick-work and plaster over a considerable cube of the building and incidentally there were not so many stairs to climb. Having decided the number of stories, one had next to consider whether the accommodation was to be arranged around a quadrangle or courts or whether it was to be E-shaped, or E-shaped with the centre tooth left out, or any other convenient shape. The next problem was the position of the ordinary class-rooms. These should be the first consideration in actual planning. Then came the convenient placing of teachers' and cloak-rooms, and finally the position of the central hall, which, of course, must be central, and not at the end of long corridors. A gymnasium and a dining-hall must be fitted in, but personally the lecturer preferred detached buildings for these adjuncts, with covered ways connecting them with the main buildings. Having arranged the main rooms in their relative positions, next had to be settled the corridors, and the designer should aim at arranging his rooms so as to necessitate the shortest length of corridors possible. Concentration should be his object, otherwise, much time and energy would be expended in passing from one part of the school to the other. He would also be faced with the problem of open or closed corridors; a question on which educationists were not in agreement. Some authorities required open corridors; others closed corridoors, i.e., walls and windows. Others, and the lecturer agreed with these, advocated a wall about 3 ft. high with windows above, arranged to fold like a folding screen. One then had what might be termed an open corridor in summer or good weather, and a closed one in winter, or bad weather. There was a grave danger to teachers and children vacating a room with a temperature of 60 deg. or over, and traversing a corridor the temperature of which is at freezing point, or even below it. Cloak-rooms required special attention, and here he joined issue with the Education Authorities, for he did not consider they received sufficient room. There should be more space between the hat and coat hooks, and if possible more space in the gangways. Cloak-rooms should be well warmed and a drying-room with sufficient heating surface should always be provided. The wash bowls should not be in the cloak-rooms, but should be so placed that during school hours the cloak-rooms could be locked and the keys kept in the possession of one of the teachers.

Needless to say, all schools should now be fireproof as regards walls and ceilings. There was no excuse for using wood joists and boarding. There are many reinforced concrete floors, precast hollow or solid, which worked out as cheap as, or cheaper, than wood. Staircases should be fireproof and reinforced concrete or stone. The lecturer preferred the former and did not recommend hardwood treads let into the concrete. They tended to become slippery, and if oiled they were dangerous. His preference was for concrete, with three rows of ¼ in. square lead plugs, inserted in rows about 4 in. wide and about 1¼ in. deep.

The subject of heating need not detain them long, but he would discuss for a moment the different methods now in use: (a) pipes and radiators; (b) through floor slabs; and (c) ceiling panels. (a) Was the method usually adopted and was the cheapest. (b) consisted of super-heated pipes in ducts under the floors, causing the floor surface to maintain and radiate the heat upwards in the room. The theory was that scholars did not feel the cold if their feet were kept warm, and that the heat as it rose warmed the atmosphere. This method was being adopted in open air schools. (c) This method of ceiling panels was being largely used in commercial buildings, and so far as he could ascertain, successfully. Like (b), it consisted of super-heated pipes encased in concrete slabs fixed on the under part of floors or ceilings, but the heat descended as from the sun. In theory this was good, but he was doubtful as to its utility in schools. In many schools we found that the central halls have a simple platform at one end. The lecturer felt that something more than this was necessary. A proper stage and proscenium should be provided, whether it be a boys' or a girls' secondary school that was being erected.

The fitting up of laboratories was generally arranged by a science master, who should always be consulted. "Carry the teachers and especially the lady teachers with you" was a good maxim, if one desired to save trouble. One science teacher told him that he preferred the fume cupboards in the centre of the room, and there was much to be commended in such an arrangement. All benches should be arranged to receive side light, but the ideal in his opinion was top light, though that was often difficult to obtain. The difficulty the architect had with this section of his building was the drainage from chemistry benches, gas pipes, and water pipes. To get over these difficulties, the lecturer had adopted the very simple method of making the floors or sub-floor (concrete) of the section 6 in. lower than the class-room floors, thus forming a well 6 in. deep. He placed all his drainage water and gas pipes in such a manner as to occupy the spaces between small wooden joists about 5 in. deep, which were laid on the concrete floor. On these joists he laid his floor boards, which were screwed where they passed over pipes. It was therefore an easy matter to gain access to any section of the under floor for repairs.

Provision should be made in all secondary schools for showing films and slides. Care must be taken to meet the wishes of the police who exercised authority over fire prevention and an exit for the operator. The operating and winding room should be absolutely fireproof.

The fitting of a gymnasium again was a special matter, and the gym. teachers should be consulted, and their wishes met if possible.

In conclusion, he would plead for good finish to inside rooms. Good door locks, knobs, and fittings of all kinds, lasted longer and look better. Attention should be given to the colouring of walls of class-rooms and corridors; and above all, let there be thoughtfulness in the design generally. Good architecture had its value and told on the student in after life. This did not mean expensive material and ornamentation; but rather proportion, colour, form. Something should be left for the eyes to rest on; buildings should not be made fussy and busy; quiet dignity was what was required in a school.

OLD ENGLISH DRINKING GLASSES

MR. GRANT R. FRANCIS, F.S.A., read a paper on this subject on January 5, before the Auctioneers' and Estate Agents' Institute of the United Kingdom, at 29, Lincoln's Inn Fields, W.C.2. The lecturer said that the first vessels of glass made in England were the product of a small company of Venetians, who settled in this country in 1549, but who returned to their own land after a short stay, and we have had no account of any material manufacture of glass vessels until Jacob Verzelini came into England from Venice to teach "the art and knowledge of the makynge of drinkynge glasses," and received a patent from Queen Elizabeth in December, 1575, for that purpose. Two glasses, definitely of his manufacture, still survived in the British Museum, and in the cabinet of Mr. Hamilton Clements, but these were foreign to our subject in that—though made in this country—they were definitely Venetian in type and treatment.

Anglo-Venetian glasses continued to be made in England for about one hundred years, and patents were successively granted to Sir Jerome Bowles, Sir Robert Mansell, and the Duke of Buckingham, for making glass vessels, but it was not until the restoration of Charles II, and the establishment of the Duke of Buckingham's glass-house, that there was any real attempt to depart from the Venetian style, or to establish a manufacture in which Britain was to become pre-eminent, and to supply a large proportion of the needs of Europe in the best quality wares. About 1670, however, English workmen were beginning to learn many things from their Venetian confreres, and a metal had been evolved which was to become famcus throughout the world under the name of "flint glass," from the fact that calcined flints were largely used in the manufacture of an earlier metal. In reality "glass of lead" was a better descriptive term, as the purely English metal was by then made from a fine sand instead of the calcined flints, and contained a considerable proportion of oxide of lead in its composition. The output, however, of the English article was insufficient to supply the demand for it, and an enterprising English merchant, by name John Greene, who had a considerable trade with Venice and Murano, conceived the idea of obtaining the much cheaper Venetian product made to English form, and as nearly as possible to the English idea of colour and strength. We found him writing very concise instructions to his Venetian correspondents, in letters still extant and dated 1668, 1671, and 1672. No less than twenty-four thousand glasses were ordered from Venice by this importer alone in five years, and a great part of them were smuggled into this country in all sorts of false-bottomed chests and cases to avoid the heavy duty of 18s. per dozen then imposed on Venetian-made glasses, in the interests of British trade. By 1680 the English article, however, had become firmly established, and Britain had finally ousted all foreign competition from her market. Her products were of magnificent quality, a typical example being the "baluster stems." This type lasted in general use until about 1750, but the heavy vessels began to go out of fashion early in the century, and were gradually succeeded by a more refined style, which became lighter and lighter in weight as time went on, until the light but true baluster stem finally resolved itself into a type with merely one or two simple knobs, as survivals of the manifold baluster swellings of the early glasses.

Meantime, apart from the highly decorative balusters, which apparently were sold singly, the opening of the eighteenth century appeared to have created a demand for glasses in "sets," exactly as we had sets of table glasses in use to-day, and these sets seemed to have originally consisted of two general types, the first with a bell bowl, and the second with a funnel bowl. In the earlier types all these were decorated with a "tear" or "blow" of air in the stem, which was probably at first a mere accident of manufacture, but its decorative effect being quickly recognised, it became a regular feature of the plain-stem glasses of 1700 to 1730. At this time, too, the practice of turning a fold of the malleable heated metal under the foot became almost universal. Later, and probably in the cheaper quality vessels for use in the taverns, these two features, the tear in the stem and the fold in the foot, were dispensed with.

Bowl shapes, too, now took on many and varied forms, the bell-bowl, the funnel or drawn-bowl, the bucket, the ogee, the double-ogee, and the straight-sided, appearing more or less in that order. In these remarks on stem types and bowl shapes it was necessary to point out that no definite hard and fast rule could be applied, and that all shapes and types necessarily overlapped. A glass that was going, or had gone, out of fashion, of course did not arbitrarily disappear, but continued to linger on in pathetic survival, exactly as one occasionally saw the "straw boater" of the last century making its reappearance amongst the softer and lighter headgear of present-day summer wear.

LAW REPORTS

Surveyor's Claim Against Brewers.

The point as to whether a semi-qualified surveyor was entitled to three months' notice was decided recently by Judge Cluer in the Whitechapel County Court, on Friday, December 16. The plaintiff in the action, described as a surveyor, sued Messrs. Hoare and Co., Ltd., of Red Lion Brewery, St. Katherine's-way, E., to recover £57, two months' salary in lieu of notice.

Mr. H. Whitmee appeared as counsel for the plaintiff, and Mr. M. E. Rowe, barrister, appeared for the defence.

Judge Cluer, after hearing evidence, said the plaintiff was higher than a mere clerk, as he went out surveying public-houses, and had to report upon them. He considered the plaintiff was entitled to one month's notice, in the absence of any proof of custom. There would be judgment for the defendants, with costs.

Decision Under Employers' Liability Act.

In the Shoreditch County Court, before Judge Cluer, an action was tried before a jury, in which Henry William Bailey, a painter, of 21, Gales-gardens, Bethnal Green, sued Commercial Structures, Ltd., of 38-44, Canal-road, Kingsland, N.E., under the Employers' Liability Act, or alternatively at Common Law, to recover £75 damages for personal injuries sustained through the collapse of a scaffold whilst he was working at Cambrian-road, Brixton, on June 3. He alleged negligent superintendence of the defendants by their servants or improper materials used in a scaffolding, which was in an unsafe condition and unfit for the work.

The jury gave a verdict for the plaintiff, awarding him £50 damages and costs. Judge Cluer said the costs were his concern, and in this case the amendment had been made at the very last minute, owing to the solicitors to the plaintiff not inquiring the exact circumstances of the accident, and framing their claim in accordance with it. Under the circumstances, he should enter judgment for the plaintiff for £50, but should allow no costs, and he certainly thought the solicitors should pay the plaintiff's costs. They would certainly have to pay them if it were a High Court action, but he had no power to order them to do so.

BUILDING FOR SOUND*

POPE referred somewhat contemptuously to the sumptuous Queen Anne mansion in the "grand manner," as "——a house but not a dwelling," and in so doing called attention to the absurdity of subordinating the chief purpose of a building to the worship of an idea. We may have progressed far in the science of domestic planning since that day, but we have not been so entirely guiltless in very similar directions. The cases where a building intended for the hearing of speech or music has failed lamentably in its purpose are too numerous to relate, and it is the continual lament of the acoustic expert that even now he is more often called in to correct faults that exist than to advise as to the conditions under which faults will not appear. We may have arrived at the stage when it is recognised that the design of an auditorium, council chamber or lecture theatre, implies an acoustic problem, but we have yet to show that we regard such buildings as instruments of sound, as distinct in form and fabric as a violin or a trumpet, and to which an architectural expression must be applied. Academism is tolerable only so far as it can serve this purpose.

Dr. Davis and Dr. Kaye have offered us the pleasanter course, and in "The Acoustics of Buildings" have presented to us what we have always looked upon as a dry-as-dust subject, as an extremely interesting [illegible]. Of particular interest are the actual photographs of sound waves with which the book is profusely illustrated. There can be nothing so conducive to an understanding of the science of acoustics as this actual visualisation of the behaviour of sound. Graphically, the path of sound is generally and conveniently treated as a ray, subject to certain geometrical rules in its reflected path after striking a surface, but this is but a part of the story, and little more than a convention. One loses the "sound-sense" until sound is thought of as a series of waves, spreading out from the origin, and thrown back in more complex wave form from the whole of the reflecting surfaces. The diagrams in this book lay stress upon this aspect, and are particularly valuable to those who really wish to grasp the subject.

The question of the relative efficiency of various materials is also given due observance in this book. Form is important no less than fabric. A violin form in brass might make music, but it would be of a strange quality, and as different from violin tone as the sound of a flute is from that of a cornet. It is a point too often forgotten in the design of an auditorium, and worthy of study. As purely a side-line, the book includes some valuable notes and data on sound-proofing which form a valuable addition to the architect's stock-in-trade.

We can heartily recommend this book to our readers as well worthy of study, and as an addition to the architect's library. Apart from the matter it contains, the type is beautifully clear, and the illustrations perfectly reproduced. A feature of the volume, which at once strikes the book-lover with pleasure, is the ease with which the pages open out flat at all places, a detail which adds materially to one's inclination to pore long over its pages.

Not long ago a depressed competitor in one of the open competitions in which acoustics played an important part was heard to complain that it was waste of time to follow the rules of that science, because the assessors themselves never knew them! The charge may have been just at one time, but we believe it is becoming less true as time goes on, and it needs but a few more works upon the subject treated like this one to ensure that the designers of auditoria shall regard the treatment of sound as the first consideration of their design. That is to say, that the purpose of the building shall determine its form and construction, which is, after all, the first principle of architectural design.

* *The Acoustics of Buildings*, by A. H. Davis, D.Sc., and G. W. C. Kaye, O.B.E., M.A., D.Sc., F.Inst.P. G. Bell & Sons., Ltd., York House, Portugal Street, London, W.C.2. 15s. net.

ARCHITECTS' & BUILDERS' INQUIRY BUREAU

We are glad to give questions and answers, but cannot accept responsibility for contributed replies, especially on legal matters.

May we appeal to our correspondents to submit their queries on paper of a size easily filed, and written as legibly as possible, or, better still, in typewriting—ED.

[We have, under this heading, each week for some time past, put at the disposal of our readers several columns for inquiries and replies concerning matters of interest to either architects or builders. In nearly all cases these inquiries have elicited one or more short replies.

Judging from the expressions of satisfaction which reach us from time to time, and by the continual use made of the Bureau, we are convinced that it meets a real need felt by many of our readers.

Many of the inquiries are, and have been, of a legal nature, calling for more extensive treatment; therefore, we are seeking to increase the usefulness of *The Builder* by alloting one column each week for an article which will discuss more fully, one at a time, certain of these legal inquiries. The title of the column will be "Legal Questions We Have Been Asked."

With this object in view, we have asked MR. W. T. Creswell, Barrister-at-Law, who is well known to our readers, to deal with the questions discussed. The first of these articles will appear in our New Year's number next week.—ED.]

Party Wall Rights.

[REPLY TO "INTERESTED," DECEMBER 23.]

SIR,—"B" would acquire an average of 4½ in. actual space, and 3 in. total space from ground. "A" appears to be most reasonable, and a fair sum to pay would be the price of a ¼ ft., £6 5s., plus a profit to "A" of 10 per cent. for the convenient and neighbourly accommodation. Otherwise "B's" alternative would be to build his own costly wall on his own space.

P. OAKES.

The Cornice.

SIR,—In reply to a recent inquiry, architecturally the cornice is part of the wall. A colour scheme toning down gradually from a light ceiling to a darker wall will generally overcome the difficulty satisfactorily.

P. OAKES.

Copyright.

[REPLY TO "JEALOUS," DECEMBER 23.]

SIR,—Under Section 5 (1) of the Copyright Act, 1911, the author, *i.e.*, the person who as a general rule makes the work, is, subject to certain exceptions, the first owner of the copyright.

An architect employed to prepare plans, etc., for remuneration retains the copyright in them, even though such plans, etc., become, when paid for, and in the absence of any specific agreement to the contrary, the property of the employer. So although "Jealous" is entitled to bring an action in both instances referred to by him—if they are capable of proof—he must bear in mind that, in so doing, he sets himself a difficult task, and one which few architects will venture upon, preferring such infringements to pass unnoticed because of the risks and costs attending such actions.

It must be remembered that an employer paying for plans, etc., can make what use of them he pleases, unless there is any restriction thereof in the contract between the employers and the architect. (See Gibbon *v.* Pease, 1905, 1 K.B. 810, and Chap xiv., Creswell on Building Contracts.)

W.

SIR,—In a small customary house-plan, often like another by coincidence, it would be difficult to prove copying; but with a large, complicated plan and distinctive elevations there would be reasonable ground for action.

P. OAKES.

Party-Wall Rights.

[REPLY TO "INTERESTED," DECEMBER 23.]

SIR,—It would appear that the wall *C* is not now a party-wall. If therefore *B* desires to acquire party-wall rights in it, it is for *A* to make the terms on which he will concede those rights. In doing so, *A* should take into account not only the cost of the party-wall itself, but (since it is stated that the wall is entirely on his own land) also the amount of land (as and by way of frontage) conceded to *B* from the centre of the 1 ft. 6 in. wall at its base towards *B's* present boundary. This may be only 9 in. in width unless, indeed, the projected footings and concrete are also on *A's* land, when it will be probably 9 in. plus 1 ft. 3 in., *i.e.*, 2 ft. altogether. Whatever it is, it should be valued at the rate of £25 a foot of frontage, as that price seems reasonable, in that *B*, it is stated, has paid at that rate for his frontage.

Presumably (since the terms "building owner" and "adjoining owner" are used in the question) the property is in the Metropolis. In this case statute law rules under the London Building Act, 1894. So if this transaction is amicably completed on the lines above indicated, *A* need not fear as to his future rights as "building owner" should he want to pull down his building and erect a higher one, and to thicken the wall. He loses his common law rights, but they are safeguarded under statute, *i.e.*, under sections 87 and 88 of the Act. Further, it must be remembered that the adjoining owner will in that case have rights under section 89 of the Acts, for in the event of the arrangements now contemplated being completed, *B* will then own halfway into the 1 ft. 6 in. wall upwards, *i.e.*, the boundary between the two properties will then be the middle of the 1 ft. 6 in. wall from its base upwards.

It may be added that had the wall *C* been in fact a party-wall at the present moment, a question might have arisen as to the rights of the adjoining owner. *B*, it is thought, would not, in this instance, have been owner of the 2¼ in. above the first set-off, and the 6¾ in. above the second set-off.

LAW.

Arbitration.

SIR,—In building houses, however good one's intentions and specification may be, misunderstandings creep in. To avoid going to law, would the simplest way be to have small matters settled by arbitration—not under the Arbitration Act, which one hears might be a lengthy and expensive process, but by referring to the Royal Institute of British Architects, or the Surveyors' Institution? Would they have any objection to arbitrating, say, in a small matter under £50, and approximately what would the charges be?

PROFIT AND LOSS.

Scaling on Glazed-Brick Walls.

[REPLY TO "PUZZLED," DECEMBER 23.]

SIR,—It is presumed that the building is not in a basement, or if it is, that the walls are properly water-proofed. Assuming that this is so, it would appear that the trouble is due to the absorption of steam condensed on the face of the glaze and collecting and absorbed by the cement joints, whence it spreads between the glaze and the brick. To my mind this indicates a glazed brick which is not perfect, *i.e.*, the glaze is not thoroughly incorporated with the clay of the brick. One can always test this with a loose brick by putting a spot of ink on the edge of the glaze preferably where this has been broken. If the glaze is well incorporated, this will not spread except over the face, but if imperfect, it will creep in between the glaze and the brick.

PRACTICE.

Zinc Roof and District Surveyor.

[REPLY TO "READER," DECEMBER 23.]

SIR,—When one arrives at a "reductio ad absurdum" it is well to trace where the absurdity starts. It is here obvious that nobody would want to build a repetition of a demolished building, whereas the case of renewal of a roof is a natural likelihood.

PRACTICE.

INTERNATIONAL HOUSING AND TOWN PLANNING CONGRESS

WE learn that the next International Housing and Town-Planning Congress will be held in the *Palais de la Sorbonne*, Paris, from July 2 to 8, 1928. At this Congress the principal subjects for discussion will be:—

Housing.

Building Costs.—The objects of the papers and discussion will be to ascertain (*a*) the present tendencies of costs, whether to rise or fall, or become stabilised, and the various factors in this question; (*b*) the effect of subsidies upon building costs; and (*c*) the methods of ensuring efficiency and economy in the production of houses.

Rural Housing.—This subject will not include housing in semi-rural mining or industrial districts. The object is to ascertain what are the needs of land-workers and those engaged in work associated with agriculture, how these needs are being met, and what further steps are necessary.

Housing of the Very Poor.—Much of the financial assistance given by governments or local authorities during the last few years has benefited those unable to afford the increase in economic rents resulting from the war. Below this strata of society is a class too poor even to take advantage of such assistance and for which special measures may be necessary in the interest of society as a whole. The object of the papers and discussion will be to ascertain what has been done to improve the housing of this class, what still remains to be done, and how far such assistance may be regarded as permanently necessary.

Town Planning.

Mass and Density of Buildings in Relation to Open Spaces and Traffic Facilities.—The object is to discuss the relations between (*a*) the height, depth, width, and total cubic contents of buildings and proportion of plot built upon; (*b*) open spaces necessary for healthy and efficient communities; and (*c*) traffic facilities, also, on the basis of the above relations, to discuss the obstacles preventing the realisation of desirable standards of requirements and practical methods of overcoming such obstacles.

Legal and Practical Difficulties in Carrying out Town and Regional Plans.—The object is to ascertain what are the legal and practical difficulties, how far they are being overcome, and by what methods, and to obtain suggestions as to further powers required or other means that may be employed to overcome obstacles to comprehensive planning.

The list of papers and special reports on these subjects will be announced in the official invitation. Arrangements are being made for congress delegates to take part in study tours of Paris combined with visits to the housing schemes and garden suburbs in Paris and the Department that will enable them to see what has been achieved in housing. These will take place during the congress week. During the following week there will be visits to provincial centres of interest from a town planning or historical point of view. During the period of the Congress there will be an exhibition dealing with housing, town planning and social welfare.

All information may be obtained from the Organising Secretary, International Federation for Housing and Town Planning, 25, Bedford-row, W.C.1.

Colwyn Bay Development.

Colwyn Bay Council is, we learn, considering a scheme estimated to cost £25,000, for erecting an entertainment pavilion on the West Promenade. It is intended later to provide bathing pools as an extension of the scheme. The matter was referred to a special meeting, which will also deal with the proposed purchase of two acres of land on the Rydal School Estate as a site for winter gardens.

THE BUILDING TRADE

POINTS IN CONNECTION WITH THE LAW OF LANDLORD AND TENANT—XI.

WHAT ARE REASONABLE GROUNDS FOR REFUSING CONSENT?

(*Continued.*)

At the conclusion of our last article we referred to a case Ideal Film Renting Co. *v.* Nielson (1921, 1 Ch. 575, *The Builder*, March 25, 1921), where the assignment was made to a limited company. In Willmott *v.* London Road Car Co., Ltd. (1910, 2 Ch. 525) it was held by the Court of Appeal that where covenants against assigning speak of "a respectable and responsible person" the word "person" in this connection includes a corporation such as a limited company, and that such a corporation was capable of being a respectable and responsible person within the meaning of such covenants. It is well to note this because a Court of first instance had decided otherwise in Harrison Ainslie & Co. *v* Barrow-in-Furness Corporation (63 L.T. 834), but in considering whether the consent to the assignment is reasonable or unreasonable the terms of the lease and the circumstances of the case have, of course, to be considered. In Jenkins *v.* Price (1908, 1 Ch. 229) the lease of an hotel provided that the lessee should reside upon the premises and carry on business there as a licensed victualler, and the Court of Appeal held this provision as incompatible with an assignment to a limited company, and that the refusal to consent to assignment to such a company was not unreasonable. This case must, however, be compared with Mills *v.* Cannon Brewery, Ltd. (1920, 2 Ch. 38), where in the case of a tied house there was no provision in the lease as to residence on the premises, and the reasons given for withholding consent to an assignment were: (1) that the assignee was a German in origin though naturalised; (2) that since the grant of the lease the lessors, in accordance with licensing requirements, insisted that their licensees should reside upon the premises, and the proposed assignee had stated that it was not his intention to do so; (3) that the assignee was interested in other licensed premises and consequently would not be able to give the necessary attention to the premises in question. The Court held the first ground of objection unreasonable as the assignee was a respectable and responsible person who had been resident in this country for many years, whilst the other grounds of objection also could not be justified as the lease contained no provision as to residing on the premises and carrying on business there and the defendants were attempting to enforce a condition not consistent with the terms of the lease.

The last case we have cited shows that a condition inconsistent with the terms of the lease cannot be imposed and constitutes an unreasonable withholding of consent. The position was very clearly stated by the Court of Appeal in Young *v.* Ashley Gardens Property, Ltd. (1903, 2 Ch. 112: *The Builder*, July 11, 1903), where it was laid down that a landlord is not bound to give a reason for refusing his licence, but in imposing a condition he does so and the Court can determine whether the refusal was reasonable. In that case a flat was held under a lease which provided that the premises should not be assigned without consent, "such licence not to be unreasonably or arbitrarily withheld." The landlord under the lease was to pay all existing and future rates and taxes. On application being made by the tenant for licence to assign a condition was attached to the consent that if in consequence of the assignment the rateable value of the premises was increased the tenant and his assignee, or one of them, should pay to the landlord any future increase in the rates and taxes due to the assignment. The Court made a declaratory order on the suit of the tenant that the landlord was not entitled to impose this condition and that the tenant was entitled to assign without any further consent.

In Evans *v.* Levy (1910, 1 Ch. 452; *The Builder*, March 26, 1910) the plaintiff was the holder of a lease which contained some onerous covenants and which provided against assignment, etc., without licence, such licence not to be unreasonably or arbitrarily withheld. He had subsequently purchased the residue of the lease and desired to assign his interest in the lease to his wife, but the lessors objected to the assignment to a married woman, and made their consent conditional on the plaintiff executing a covenant for himself, his executors and administrators to pay at all times during the continuance of the lease the rent and to perform all the covenants and conditions of the lease. It was held that this condition was unreasonable and that the assignment could be made without further consent. We may, however, here observe that the lease itself may contain a covenant to the effect of the condition here sought to be imposed which would bind the assignee. See Chatterton *v.* Terrell (1923, A.C. 578) and our observations thereon at the end of our ninth article.

Where a lessee proposes to underlet, the lessor is entitled to information as to the terms of the sublease, as he may be responsible to his own lessor under the head lease. This is shown by a decision of the Privy Council in Fuller's Theatre and Vaudeville Co. *v.* Rofe (1923, A.C. 435; *The Builder*, August 31, 1923). There certain premises had been leased by the Municipal Council of Sydney to the respondent under a lease which, besides containing a covenant prohibiting, assigning or underletting without consent the premises or any part thereof, contained most onerous covenants as to user, etc. The respondent with consent had subleased a portion of the estate to the appellants, and this sublease contained a provision against assigning or underletting without the consent both of the respondent and the Council, and also referred to the uses to which the premises might be put, by reference to the head lease, but there was a further provision that the respondent would raise no objection to an assignment or underletting not objected to by the Council. The appellants desired to sublet a portion of the premises, but gave the respondent no particulars of the terms of the sublease to which they asserted the consent of the Council had been obtained. The respondent insisted that before he gave his consent the terms of the sublease should be disclosed to him. The appellants denied this right and sublet the premises. The respondent brought an action to recover possession for breach of covenant, and the Privy Council held that the respondent had not refused his consent but had only asked for information to which he was legally entitled and which was necessary for his own protection as regards his own lessor and that the appellants had committed a breach of covenant, and judgment must be given for the respondent.

Although, as we have stated above, it was laid down in Young *v.* Ashley Gardens Property that a landlord or lessor need not give a reason for withholding his consent, a blank refusal would be an unreasonable or arbitrary refusal (see Treloar *v.* Bigge (L.R. 9 Ex 151) and per Lord Esher in Barrow *v.* Isaacs (1891, 1 Q.B. 417)), and on that a declaratory judgment can be applied for, as in Young *v.* Ashley Gardens. In Jenkins and Price (*ubi sup*) and Evans *v.* Levy (*ubi sup*) it was held that where a declaratory judgment is sought with no claim for relief, costs of the action should not be granted, but these decisions as to costs were overruled by the Court of Appeal in West *v.* Gwynne (1891, 1 Q.B. 417).

It is important to bear in mind that a formal application must be made for leave to assign, for an assignment or underletting made without application is a breach of the covenant, and the Court will not give relief. (See Barrow *v.* Isaacs (*ubi sup*), also Lewis & Allenby *v.* Pegge, 1914, 1 Ch. 582.)

Having now touched upon conditions imposed as a condition of consent we come to the second branch of our subject.

The Imposition of Fines.

In our eighth article we referred to section 3 of the Conveyancing Act, 1892 (now section 144 of the Law of Property Act, 1925). That section provides that in all leases containing a covenant against assigning, underletting or parting with the possession or disposing of the land or property leased without licence or consent, such covenant shall unless the lease expressly otherwise provides, be deemed to be subject to a proviso to the effect that no fine or sum of money in the nature of a fine shall be payable in respect of such licence or consent; costs and other expenses reasonably incurred not being included in this proviso.

The cases are rather uncertain on this question.

In Waite *v.* Jennings (1906, 2 K.B. 11), upon application by the defendant for licence to assign, the plaintiff, the lessor, had made it a condition of consent that the defendant should covenant to pay the rent and perform the covenants of the lease during the residue of the term and the licence containing this covenant was by deed to which the defendant was a party. Subsequently the plaintiff under this covenant sought to recover from the defendant a quarter's rent left unpaid by the assignee. The Court of Appeal held that whether or not such a covenant was in the nature of a fine within the meaning of the statute, the statute not having made the payment of a fine illegal it was no defence to the action on the defendant's covenant, but the Court also held (Lord Justice Fletcher Moulton dissenting) that a covenant which secures to a lessor no sum of money beyond the rent to which he is entitled under the lease is not a fine under the statute.

It will be seen, however, that the imposition of such a condition would make the refusal to consent unreasonable (see Evans and Levy (*ubi sup*) and West *v.* Gwynne (*ubi sup*)), and in the latter of these two cases it was held by the Court of Appeal that the statute applied to every lease whether executed before or after the passing of the Act, and that a covenant against assigning cannot be used by the lessor as a source of profit, and that if a lessor refuses to grant a licence except on payment of a fine the lessee is entitled to disregard the covenant and assign without consent, but he is also entitled to a declaratory judgment to that effect, which, if granted, can carry the costs of the action. In Andrew *v.* Bridgman (1908, 1 K.B. 596; *The Builder*, April 18, 1908), as a condition of consent to an assignment a payment of £45 had been demanded and paid as the Court held without protest, and the lessee was seeking to recover the sum thus paid. The Court of Appeal, as in Waite *v.* Jennings (*ubi sup*) held that the statute did not make the payment illegal so the sum could not be recovered, at the same time indicating that it expressed no opinion whether the fact of its having been paid under protest made any difference. The Court also indicated that the proviso introduced by the statute was analogous to the proviso found in covenants against assigning that licence should not un-

reasonably be withheld, the payment demanded released the lessee from obligation not to assign without it.

As regards the point raised in Waite *v.* Jennings (*ubi sup*) that the demand of a sum of money which does not exceed the rent to which the lessor is entitled under the lease is not a fine, we may point out that an increase of rent made a condition of consent would be a fine. This appears from Jenkins *v.* Price, a case we referred to at the beginning of this article. In that case the lessors, in giving consent to the assignment to a brewery company, made it a condition that the rent should be increased and the term extended. The Court of first instance held that this contravened the statute. This point was not decided when the case was appealed for as we have shown the Court of Appeal found that the covenant which required residence on the premises prevented an assignment to a limited company which made it unnecessary for the Court to consider any other question.

We may conclude this article with a case relating to a building contract *In Re* Cosh's Contract (1897, 1 Ch. 9). There the trustees of a charity had invited tenders for a contract for the pulling-down and re-erection of certain buildings under which the contractor was to give security for performance of the conditions, and it was further provided that when the buildings were completed, or covered in, a lease should be granted to the contractor, but the lease also contained a provision that the contractor would not assign, etc., without the previous consent of the lessors. Cosh had offered to undertake the pulling-down and re-erection of the buildings and to accept a lease, and the security was to be £1,000 immediately and a further £1,000 before pulling down some of the buildings. Subsequently an arrangement was made that one Finch should guarantee the rebuilding and performance of that part of the contract in respect of which the further security had been asked, and it appears to have been held by the Court that after this the trustees would have no right under the contract to require any further security. When one of the properties had been rebuilt Finch and Cosh contracted to sell their leasehold interest and applied to the trustees the lessors for consent, but the trustees made it a condition of granting their licence that a sum of money should be deposited as security for performance of the unperformed portions of the building contract entered into by Cosh under the original contract. The Court came to the conclusion that this was demanded as a condition of giving the licence and not as security to which they were entitled under the original agreement, but held that this did not constitute a fine under section 3 of the statute as the section points to a sum of money which is to go irrevocably into the pocket of the lessor, and not to a deposit which will be returned to the lessee if he performs the contract.

NEW BUILDINGS IN LONDON

Aldwych.—PREMISES. — The L.C.C. have sanctioned plans for the erection of "Columbia House," in Aldwych, Houghton-street, and New Inn-passage, W.C., to a height greater than permitted under the London Building Act, 1894. The builders are Messrs. Higgs & Hill, Ltd., Crown Works, South Lambeth-road, S.E., and steelwork is now being erected by Messrs. Powers & Deane, Ransomes, Ltd., Cubitt Town Steel Works, E.15. The architects are Messrs. Trehearne & Norman, Windsor House, 83, Kingsway, W.C.2.

Aldwych. — EXTENSION. — Messrs. Bovis, Ltd., the building contractors, have secured a contract from Bush House, Ltd., for a big extension on the west site. Messrs. Helmle, Corbett & Harrison, Bush House, W.C. 2, are the architects.

Becontree.—SCHOOL.—A sum of £36,048 is recommended by the Essex Education Committee for the erection and completion of a school in Lymington-road.

Bethnal Green.—FLATS.—A freehold site in St. Jude-street has been acquired by the Bethnal Green Housing Association, Ltd., 21, Old Ford-road, E.2, where it is proposed to build a block of 16 self-contained flats. Plans have been prepared by Mr. Ian B. M. Hamilton, F.R.I.B.A., 16, Old Buildings, Lincoln's Inn, W.C.

Brixton-road.—BUILDING.—Messrs. Cluttons, estate agents, are to have new premises at 180 and 182, Brixton-road. Plans for these premises have been submitted to the Lambeth Borough Council.

Dagenham.—SCHOOLS.—The Essex Education Committee recommend £229,843 for the erection of schools and the purchasing of various sites.

Edmonton.—HOUSES.—Forty-four houses are to be erected on the North Circular-road. Messrs. White and Large submitted the plans to the local Council for approval.

Eltham.—ADDITIONS.—It is proposed to carry out extensive additions to Westwood, Court-road, S.E.9, including a new swimming-bath, racquets court, garage, etc. Plans have been prepared by Messrs. George Hubbard & Son, FF.R.I.B.A., 45, New Bond-street, W.1.

Euston-road.—HOSPITAL.—The foundation-stone was laid recently of the new extension building of the Elizabeth Garrett Anderson Hospital for Women in Euston-road, N.W.1. Sir Brumwell Thomas, F.R.I.B.A., F5, Albany, Piccadilly, W.1, is the hon. architect, and Mr. Albert Monk, Lower Edmonton, N., the builder.

Fleet-street.—LEASE.—A building lease of 125, Fleet-street, E.C. 4, has been granted by the Merchant Taylors' Company to Mr. M. W. Edgley, 2, Bolt-court, Fleet-street, E.C.4.

Gray's Inn-road.—CLINIC.—Mr. George Eastman, of Rochester, U.S.A., head of the Kodak Company, has now completed his gift of a dental clinic to the Royal Free Hospital, London, by transferring the sum of £200,000 to trustees upon trust to erect and equip the building to be erected on a site in Gray's Inn-road. The plans have been prepared by Sir John Burnet and Partners.

Hampstead.—ADAPTATION.—The Dalcroze Society of Eurhythmics propose to acquire the Hampstead Conservatoire for adaptation as a school and headquarters. Mr. E. Maufe, F.R.I.B.A., 3, Raymond's Buildings, Gray's Inn, W.C.1, is the architect for the alterations proposed.

Herne Hill.—BUILDING.—Messrs. W. J. Mitchell & Son are the builders for the new building which is to be erected on a site abutting upon Herne Hill and Milkwood-road, S.W.

Lewisham. — HOUSES. — The Lewisham Borough Council has accepted the tender of Messrs. David Weston & Co., Ltd., of New Bridge-street, E.C., amounting to £99,775, for the erection of 192 houses and 32 flats on the Grove Park estate.

Newington Butts.—PREMISES.—Mr. P. A. Hamilton, architect and surveyor, of 69, Kennington Oval, has prepared plans and submitted them to the Lambeth Borough Council for approval for erection of premises at 130, Newington Butts.

Queen's-road. — REBUILDING. — We regret that a mistake was made in the paragraph which appeared in our issue of December 23. Application was made to the L.C.C. by Mr. P. J. Westwood, of 14, Buckingham-street, W.C.2, and not Messrs. Westwood & Emberton, as stated.

Uxbridge-road. — EXTENSIONS. — Messrs H. & F. Worrow, of Basinghall-street, are the architects for the alterations and extensions to 132, Uxbridge-road, and the contract has been placed with Mr. C. R. Price, of Bishopsgate.

Westminster. — RESIDENCE. — Plans have been approved for a new town residence at the corner of Medway-street and Arneway-street, S.W.1, for the Hon. Mrs. P. Methuen. The architect is Mr. J. Douglas Scott, A.R.I.B.A., 20, Bedford-row, W.C.

COMING SLUM LEGISLATION

A CORRESPONDENT writes as follows:—

"New legislation in order to deal with slums is shortly to be introduced. One feature of the new Bill is to be assistance for the reconditioning of insanitary houses. This is, of course, continuing the policy adopted in the Housing (Rural Workers) Act, 1926, whereby subsidies are given for the repair of cottages in country districts. Mr. Neville Chamberlain considers that now that over one million houses have been built, the time has come when local authorities may turn their energies more to slum areas. The need for this is obvious. Mr. Frank Hunt, of the London County Council, recently reported that in 1922 there were 200,000 people living in London in slums which ought to be cleared, and, in addition, 350,000 people living in congested areas. In spite of numerous Housing Acts from 1875 onwards, the total number of people affected by half a century of slum clearances schemes in London, including those of the London County Council, is only about 70,000. There is plenty of evidence that conditions are equally serious in other parts of the country.

"For various reasons—the high cost of building, the difficulty of obtaining land adjacent to factories, the protracted procedure necessary under existing legislation, the obstacles placed in the way of acquiring slum property, and the inadequate basis of compensation now offered—local authorities are finding it difficult, if not impossible, to carry through with any celerity the clearing of unhealthy areas. Though an annual Exchequer grant of £150,000 for slum clearances was contemplated under the Housing Act of 1923 to be given to local authorities in England and Wales, excluding London, yet for the year 1926-27 only £18,000 was estimated to be payable.

"Mr. Chamberlain, after a protracted consideration, has now decided in favour of a policy of reconditioning. The following recommendation was made in 1926 in the Report of the Committee on Unhealthy Areas over which he so ably presided: 'Pending reconstruction, unhealthy areas might be materially improved if they were purchased by local authorities on terms equitable to present owners, but not prohibitive in cost, and the houses therein altered, repaired and managed on the Octavia Hill system.' This is, however, a policy of expediency, and has two admitted disadvantages. In the first place, reconditioning of property, unless it be sound structurally, and is carried out with skill, is costly. Most local authorities, including the L.C.C., fight shy of taking over poor property, because they anticipate continuous expense, and know the difficulties of dealing with tenants who cannot be relied on to pay even meagre rent regularly, and who are often dirty and destructive.

"A second serious defect of any policy, including purchase out of public funds, is political. It is undoubtedly dangerous for a local authority to become the owner of slum property, for this may easily lead to similar abuses to those that are now taking place in Poor Law relief. Examples from the north of England can be quoted to show that Labour councillors find it easy to advocate lower rents of municipal houses, when elections are near, and that such bribes to tenants of municipal houses are readily taken. For a local authority to own large areas of poor property is certainly to risk corruption. Voluntary societies are in every way more desirable instruments for 'reconditioning.'

"It is understood that Mr. Neville Chamberlain has weighed carefully all these factors, realising clearly both the advantages and the disadvantages of the State adopting a general reconditioning campaign, but he considers it imperative that something should be done without delay to improve conditions in the congested areas of our large towns. By a patient policy of opening out such districts, and by economical reconditioning, much may be done."

RATES OF WAGES IN THE BUILDING TRADE

[Every endeavour is made to ensure accuracy but we cannot be responsible for errors.]

	Masons	Brick-layers.	Car-penters Joiners	Plas-terers.	Slaters.	Plum-bers.	Pain-ters.	Lab-ourers.
Aberdare	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Accrington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Alfreton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Alnwick	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Altrincham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Ashford (Kent)	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Ashington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Ashton-under-Lyne	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Aylesbury	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Aylsham	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Banbury	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Barnsley	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Barnstaple	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Barrow-in-Furness	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Barry	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Basingstoke	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Bath	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Bedford	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Berwick	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Bexhill	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
Birkenhead	1/10	1/10	1/10	1/11	1/10	1/10	1/9½	1/4½
Birmingham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Bishop Auckland	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Blackburn	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Blackpool	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Bolton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Bournemouth	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Bradford	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Bradford-on-Avon	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/3½	1/0½
Braintree	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Brentwood	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Bridgwater	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
Bridlington	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Brighton	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Bristol	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Bromsgrove	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Bromyard	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0½
Bungay	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Burnley	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Burton-on-Trent	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Bury	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Buxton	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Cambridge	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Canterbury	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Cardiff	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Carlisle	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Chatham	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Chelmsford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Cheltenham	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Chester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Chesterfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Chorley	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Cirencester	1/5	1/5	1/5	1/5	1/5	1/5	1/4	1/1
Clacton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Colchester	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Coventry	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Cranbrook	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Crewe	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Cromer	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Darlington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Deal	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Denbigh	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Derby	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Devizes	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/3½	1/0½
Dewsbury	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Doncaster	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Dorchester	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/3½	1/0½
Dorking	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Dovercourt	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
Driffield	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Droitwich	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Dudley	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Durham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Eastbourne	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
E. Glam. (Mon. Val.)	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Ely	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Exeter	1/7	1/7	1/7	1/7	1/7	1/7	1/6	1/2½
Exmouth	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
Fakenham	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Felixstowe	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Folkestone	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
Frome	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/3½	1/0½
Glossop	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Gloucester	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/5½	1/2
Godalming	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
Goole	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Gosport	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Grantham	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Great Yarmouth	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Grimsby	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Guildford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Halifax	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Harpenden	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Harrogate	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Hartlepools	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Harwich	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
Hastings	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Hatfield	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Hednesford	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Hereford	1/6	1/6	1/6	1/6	1/6	1/6	1/5	1/1½
Herne Bay	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Hertford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Hitchin	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Hoddesdon	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Holt	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Huddersfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Hull	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Hunstanton	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Huntingdon	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
Isle of Wight	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0½
Ipswich	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Keighley	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Kettering	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Kidderminster	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
King's Lynn	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
Lancaster	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Leamington Spa	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Leeds	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Leicester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Leighton Buzzard	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Lichfield	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Lincoln	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Littlehampton	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
Liverpool	1/10	1/10	1/10	1/11	1/10	1/10	1/9½	1/4½
Llandudno	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Llanelly	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
London:								
12 m. radius	1/9½	1/9½	1/9½	1/9½	1/9½	1/9½	1/8½	1/4½
12–15 m. radius	1/9	1/9	1/9	1/9	1/9	1/9	1/8	1/4
Loughborough	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Lowestoft	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Luton	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Macclesfield	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Maidstone	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Malvern	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Manchester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Mansfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Margate	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Market Harb'rough	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Matlock	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Melton Constable	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Melton Mowbray	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Merthyr Tydfil	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Middlesbrough	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Newark	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Newbury	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Newcastle-on-Tyne	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Newcastle-ur-Lyme	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
New Forest	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
Newmarket	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
Newport, Mon.	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Northampton	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Norwich	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Nottingham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Nuneaton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Oakham	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Oldham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Oxford	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Paignton	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Peterborough	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Plymouth	1/8	1/8	1/8	1/8	1/8	1/8	1/7	1/3½
Pontypridd	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Portsmouth	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Preston	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Ramsgate	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Reading	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Redcar	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Redditch	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Reigate	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Retford	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Ripon	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Rochdale	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Rochester	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Rugby	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Saffron Walden	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
St. Albans	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
St. Helens	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Sawbridgeworth	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Saxmundham	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0½
Scarborough	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Sevenoaks	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Sheffield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Shrewsbury	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Sittingbourne	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Southampton	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Southend-on-Sea	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Southport	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
South Shields	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Stevenage	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Stockport	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Stockton-on-Tees	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Stoke-on-Trent	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Stourbridge	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Stourport	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Stowmarket	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Stratford-on-Avon	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Stroud	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5	1/1½
Sunderland	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Swaffham	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Swansea	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Swindon	1/6	1/6	1/6	1/6	1/6	1/6	1/5	1/1½
Tamworth	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Taunton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Thetford	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Torquay	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Totnes	1/5	1/5	1/5	1/5	1/5	1/5	1/4½	1/1
Trowbridge	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/3½	1/0½
Tunbridge Wells	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Uttoxeter	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Wakefield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Walsall	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Wallsend	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Warminster	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/3½	1/0½
Warrington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Warwick	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Wells (Norfolk)	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Welwyn. Gar. City	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
West Bromwich	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Weston-sup.-Mare	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Weymouth	1/5	1/5	1/5	1/5	1/5	1/5	1/4	1/1
Whitby	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Wigan	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Winchester	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
Windsor	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Wisbech	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Wolverhampton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Woodbridge	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Worcester	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Worksop	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Worthing	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
Wrexham	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Wroxham	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Wymondham	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0½
York	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½

For rates of wages in the Building Trade in Scotland, see page 35.

CONTRACTS, COMPETITIONS, &c.

For some contracts still open, but not included in this List, see previous issues. Those with an asterisk are advertised in this number. Certain conditions beyond those given in the following information are imposed in some cases, such as that advertisers do not bind themselves to accept the lowest or any tender; that a fair wages clause shall be observed, that no allowance will be made for tenders; and that deposits are returned on receipt of a bona-fide tender unless stated to the contrary.

The date given at the commencement of each paragraph is the latest date when the tender, or the names of those willing to submit tenders, may be sent in; the name and address at the end is the person from whom or place where quantities, forms of tender, etc., may be obtained.

Following is a list of abbreviations:—Borough Surveyor, B.S.; Borough Engineer, B.E.; District Surveyor, D.S.; Clerk, C.; Town Clerk, T.C.; County Engineer, C.E.; County Surveyor, C.S.; County Architect, C.A.; Surveyor, S.; Engineer, E.; Borough Architect, B.A.; Architect, A.

BUILDING, PAINTING, ELECTRIC LIGHTING, HEATING ETC.

Jan. 9.—**Dublin.**—Alterations.—To Pearse-st. library, and painting work at Tara-st., Thomas-st. and Dorset-st. fire stations, for C.B. Architect's Department, Exchange Buildings, Lord Edward-st.

Jan. 9.—**Essex.**—Handicraft Centre.—Erection of, comprising cookery, laundry and manual rooms, at Braintree, for the Essex C.C. Jno. Stuart, F.R.I.B.A., County Architect, Springfield Old Court, Chelmsford. Dep. £1 1s. to F. H. Owers, F.S.A.A., County Accountant, Duke-street, Chelmsford.

Jan. 9.—**Hendon.**—Public Library.—Erection of the first portion of a Public Library at The Burroughs, Hendon, N.W.4, for the U.D.C. J. M. Wilson, F.R.I.B.A., 4, Staple-inn, W.C. Dep. £5 5s. (by cheque).

Jan. 9.—**Nottingham.**—Painting.—Fences, King Edward-park, for T.C. T. Wallis Gordon, City Engineer and Surveyor. Dep. £1.

Jan. 9.—**Parbroath.**—House.—For Cupar District Committee of Fife C.C. Walker & Pride, architects, Church-sq., St. Andrews. Dep. 10s. 6d.

Jan. 9.—**Plymouth.**—Repairs.—Improvement and repair of existing hutments at Waterloo-place and existing hutments and stone dwellings at Elphinstone Barracks (Citadel site), for C.B. J. Wibberley, B.E. S. and A.

Jan. 9.—**Thingoe.**—Cottages.—6 cottages at Fornham All Saints, and 6 cottages at Risby, for R.D.C. Surveyor, 65, Churchgate-st., Bury St. Edmund's. Dep. £2 2s.

Jan. 9.—**Warrington.**—Alterations.—Also additions to porter's lodge, Padgate Cottage Homes, for B.G. A. Bottomley, clerk, Museum-st.

Jan. 9.—**Warrington.**—Houses.—162 on Bewsey estate, for C.B. A. M. Ker, B.E. and S. Dep. £2 2s.

Jan. 9.—**Woolwich.**—Extension.—Of the Cable Depot, for H.M.O.W. Contracts Branch, King Charles-st., London, S.W.1. Dep. £1 1s. (Payable to the Commissioners.)

Jan. 10.—**Camberwell.**—Cemetery.—Erection of chapel and other buildings, Camberwell New Cemetery. C. E. Newton, Town Clerk, Town Hall, Camberwell, S.E.5, with details of similar contracts.

Jan. 10.—**Castleford.**—Demolition.—Taking down and removal of iron and steelwork from Market Hall, for U.D.C. D. Firth, E. and S.

Jan. 10.—**Darfield.**—Installation.—Of electric light at new infants' school, for West Riding E.C. Education Department, County Hall, Wakefield.

Jan. 10.—**Dublin.**—Joinery.—At General Post Office, for Commissioners of Public Works. T. Cassedy, secretary, Dublin. Dep. £1.

Jan. 10.—**Eccleshield.**—Heating.—Providing and fixing a low pressure hot water installation at High-Green new boys' school, for West Riding E.C. Education Department, County Hall, Wakefield.

Jan. 10.—**Harwich.**—Houses.—49, for T.C. F. H. French, B.E. and S.

Jan. 10.—**Ilkeston.**—Houses.—40, on Southern housing estate, for T.C. B.S. Dep. £2 2s.

Jan. 10.—**Liverpool.**—Painting.—Exterior and general repairs at police court-buildings, Central police-buildings, etc., Dale-st., for T.C. Land Steward and Surveyor.

Jan. 10.—**North Berwick.**—Houses.—Two blocks of three-apartment houses and two blocks of four-apartment houses at Lochbridge-rd., for T.C. A. Robertson, B.S.

Jan. 10.—**Norwich.**—Stand.—Construction of shedding, grand stand, offices, and other woodwork erections, at Crown Point, for Royal Norfolk Show. W. Kerridge, secretary, East Harling, Norwich.

Jan. 10.—**Ormskirk.**—Repairs.—Also improvements at casual wards, for B.G. Master of the Poor Law Institution.

Jan. 10.—**Portsmouth.**—Extensions.—To boys' secondary school, Victoria-rd., North, for E.C. A. J. Sharp, architect. Dep. £1 1s.

Jan. 11.—**Ballyclare.**—School.—Public elementary school at Ballyrobert, Ballyclare, for Antrim Regional E.C. W. D. R. Taggart, C.E., Scottish Provident Buildings, Belfast. Dep. £1 1s.

Jan. 11.—**Cardiff.**—Painting.—Also renovating at police and fire stations in City, for T.C. G. H. Whitaker, City Engineer and Architect.

Jan. 11.—**Liverpool.**—Houses.—Offers wanted from contractors to build houses in brickwork on various housing estates in lots of 50 houses, for the City Council. Acting Director of Housing, Municipal Buildings, Dale-st., Liverpool. Dep. £1 1s.

Jan. 11.—**Middleton.**—Widening.—2,000 lin. yds., of 4 ft. 6 in. high wrought-iron railings, together with 15 pairs of field gates, for T.C. B.E. and S.

Jan. 12.—**Belfast.**—Partitions.—Two folding partitions in St. Simon's Public Elementary School, for C.B. Education Architect, Education Office, Victoria-st.

Jan. 12.—**Campbeltown.**—Houses.—Three blocks of houses, each containing four houses of two apartments and two blocks of houses each containing four houses of three apartments, at Smith-drive, for T.C. Thos. Mackelvie, T.C.

Jan. 12.—**Cranbrook.**—Heating.—Of Vestry Hall, by low pressure hot water system, for P.C. E. Clarke, C.

✱Jan. 12.—**Greenwich.**—Porter's Lodge, etc.—Erection of a porter's lodge, weighbridge foundation and alteration to entrance gateway to the Greenwich and Deptford Institution. Alfred Roberts, F.R.I.B.A., 92, London-st., Greenwich, S.E.10. Dep. £2.

Jan. 12.—**Rossington.**—Fencing.—Asphalting and erection of unclimbable fencing, etc., at Council school, for West Riding E.C. Education Department, County Hall, Wakefield.

Jan. 12.—**West Bromwich.**—Repairs.—To roofs, porter's lodge, Hallam House, for B.G. J. P. Osborne & Son, architects, 95, Colmore-row, Birmingham.

Jan. 13.—**Bristol.**—Houses.—12, at Bedminster Down, for T.C. D. S. McKenzie, City E. and S., 51, Prince-st. Dep. £1.

Jan. 13.—**Heywood.**—Employment Exchange.—Erection of, for H.M.O.W. Contracts Branch, King Charles-st., London, S.W.1. Dep. £1 1s. (Payable to the Commissioners.)

Jan. 13.—**Hull.**—Engine House.—At Dunswell pumping station, for T.C. W. D. Bingham, Water and Gas Engineer. Dep. £2.

Jan. 13.—**March.**—Building.—Extension of retort house and retort firebrick arches, at Gas Works, The Causeway, for Gas and Coke Co. C. Greenwood, secretary, Market-pl. Dep. £2 2s.

Jan. 13.—**Portsmouth.**—Decorations.—Redecoration of the interior of the Grand Pavilion of the South Parade Pier, Southsea, for the City Council. Richard J. Jenkins, City Engineer, Guildhall. Dep. £2 2s.

Jan. 14.—**Clowne.**—Houses.—At Chesterfield-rd., Barlborough, for R.D.C. J. Haslam, architect, Ryton-chambers, Bridge-st., Worksop.

Jan. 14.—**Kirkcaldy.**—Fencing Posts.—Supply of concrete fencing posts, for T.C. B.S.

Jan. 14.—**Ludlow.**—Repairs.—Also additions and alterations to school premises, for managers of Ludlow Church of England Schools. J. H. Lockhart, 22, Broad-st. Dep. £1 1s.

Jan. 14.—**Musselburgh.**—Houses.—52 flatted 3-room houses in blocks of four, for T.C. B.S. Dep. £3 3s.

Jan. 14.—**Pembroke.**—Houses.—183, for U.D.C. Thomas F. MacNamara, architect, 5, Dawson-st., Dublin. Dep. £1.

Jan. 14.—**Reading.**—Decoration.—Internal, at 110 houses on Shinfield-rd. housing estate, for C.B. Housing Architect, Municipal Buildings, St. Laurence's-churchyard.

Jan. 14.—**Taunton.**—Cottages.—Pair, on Lambrook Estate, for T.C. Stone & Francis, FF.R.I.B.A., architects, 7, Fore-st. Dep. £2 2s.

✱Jan. 16.—**Acton and Hayes.**—Houses and Sewers.—Erection of a further 52 at Acton, with roads and sewers, and 50 at Hayes, for the Great Western (London) Garden Village Society, Ltd. T. Alwyn Lloyd, F.R.I.B.A., 6, Cathedral-rd., Cardiff. Dep. £3 3s.

Jan. 16.—**Cardiff.**—Painting.—Also renovating, etc., at City Hall, for T.C. G. H. Whitaker, City Engineer and Architect.

✱Jan. 16.—**Essex.**—Section Headquarters.—Erection of, in Corringham-rd., Stanford-le-Hope, for the Essex Territorial Association. The Secretary, Market-rd., Chelmsford. Dep. £2 2s.

Jan. 16.—**Hertfordshire.**—School.—Erection and completion of a new County Council Elementary School (to accommodate 402 scholars), for the Hertfordshire C.C. County Surveyor's Office, Hatfield, Herts. Dep. £1 1s.

Jan. 16.—**Horden.**—Wall.—530 yds. of dwarf walling and providing and erection of palisading on Horden Colliery Wall, for Miners' Welfare Committee. W. Johnson, Engineer, Horden Colliery.

Jan. 16.—**Leeds.**—Building.—Erection of, for Mining Dept., for the Council of the Leeds University. The Registrar, The University, Leeds. Dep. £2 2s.

Jan. 16.—**Rochford.**—Lavatory.—Accommodation at poor law institution, for B.G. W. H. Roberts, C., 27, Victoria-av., Southend-on-Sea.

Jan. 16.—**Sandwich.**—Heating.—Extensions to existing heating system at Town Hall, for T.C. Wm. C. Moultrie, Acting Borough Surveyor. Dep. £2.

Jan. 16.—**Willenhall.**—Houses.—120 non-parlour type, on Albion-rd. site, for U.D.C. G. A. Waite, B.S. Dep. £2 2s.

Jan. 16.—**York.**—Houses.—14 in Glen-av., and 36 adjoining Tang Hall-lane, for T.C. F. W. Spurr, City E. Dep. £2 2s.

Jan. 17.—**Dublin.**—Buildings.—At 45, Upper O'Connell-st., for Commissioners of Public Works. T. Cassedy, secretary. Dep. £1.

Jan. 17.—**Dublin.**—Reconstruction.—Of north block of Four Courts, for Commissioners of Public Works, Dublin. T. Cassedy, secretary. Dep. £1.

Jan. 17.—**Flint.**—Houses.—38, for T.C. W. B. Edwards, A.R.I.B.A., 84, Church-st. Dep. £3 3s.

✱Jan. 17.—**Fulham.**—Boundary Wall.—Pulling down and re-erection of a brick and stone boundary wall of North Sheen Cemetery to Mortlake, for the B.C. A. F. Holden, M.I.C.E., B.S., Town Hall, Fulham, S.W.6.

Jan. 17.—**Leeds.**—School.—Boys' and girls' departments, at Meanwood Council school, for E.C. J. Graham, Director of Education.

Jan. 17.—**Stocksbridge.**—Houses.—20, at Deepcar, for U.D.C. H. M. Aitchison, A. and S.

Jan. 18.—**Falmouth.**—Houses.—146 at Penwerris, for T.C. H. E. Tresidder, B.S.

Jan. 18.—**Portadown.**—Reconstruction.—Of Shambles, William-st., Portadown, for U.D.C. E. Ferguson & S. M'Ilveen, architects, 38, Scottish Provident-buildings, Belfast. Dep. £2 2s.

Jan. 19.—**Birmingham.**—Telephone Exchange.—Erection of, at Aldridge, for the Commissioners H.M.O.W. Contracts Branch, King Charles-st., London, S.W.1. Dep. £1 1s. (Cheques payable to the Commissioners.)

Jan. 19.—**Connah's Quay.**—Telephone Exchange.—Erection of, at Connah's Quay, for the Commissioners of H.M.O.W. Contracts Branch, King Charles-st., London, S.W.1. Dep. £1 1s. (Cheques payable to the Commissioners.)

Jan. 19.—**Kendal.**—Cottages.—100, at Skating Rink-field, for T.C. F. W. Oxberry, B.S. Dep. £1 1s.

Jan. 20.—**Atherton.**—Employment Exchange.—Erection of, at Atherton, Lancs, for the Commissioners, H.M.O.W. Contracts Branch, King Charles-st., London, S.W.1. Dep. £1 1s. (Cheques payable to the Commissioners.)

Jan. 20.—**Colbeck (Sligo).**—School.—National School at Colbeck, Co. Sligo. J. Curley, P.P., manager, Riverstown.

✱Jan. 20.—**Eastleigh.**—Public Hall.—Erection of, for the Eastleigh and Bishopstoke U.D.C. W. Wallace Gandy, E. and S. to the Council, Council Offices, Eastleigh. Dep. £2 2s.

Jan. 20.—**Falcarragh.**—Extensions.—To Ballyconnell House, for Commissioners of Public Works. T. Cassedy, secretary, Dublin. Dep. £1.

Jan. 20.—**London.**—Wall.—Embankment and river wall, about 565 feet in length, in Thames in front of Grosvenor-rd., on the upstream side of Lambeth Bridge, for L.C.C. Chief Engineer, Old County Hall, Spring Gardens, S.W.1. Dep. £5.

Jan. 20.—**Loughton.**—Post Office and Telephone Exchange.—Erection of, at Loughton, Essex, for the Commissioners of H.M.O.W. Contracts Branch, King Charles-st., London, S.W.1. Dep. £1 1s. (Cheques payable to the Commissioners.)

Jan. 21.—**Adwick-le-Street.**—Houses.—80, at Park-lane and Chestnut-av., Skellow, for U.D.C. S. Dep. £2.

Jan. 21.—**Leicester.**—Extensions.—To Central Generating Station, for T.C. T. R. Smith, City Electrical Engineer, Market-st. Dep. £5.

Jan. 21.—**Stepney.**—Stores, etc.—Contracts for one year from April 1, 1928, for the B.C. Borough Engineer and Surveyor and the Town Clerk, Municipal Offices, Raine-st., Old Gravel-lane, E.1. Dep. £1 Treasury note in respect of each tender.

Jan. 23.—**Cambridge.**—New workshops and caretaker's house at the Central Schools, for the Corporation. Borough Engineer and Surveyor, The Guildhall, Cambridge. Dep. £2.

✱Jan. 23.—**Staines.**—Houses.—Erection of 22 at Walton-lane, Shepperton, for the R.D.C. D. C. Fidler, surveyor, London-rd., Ashford, Middlesex. Dep. £2 2s.

Jan. 23.—**Whitehaven.**—Houses.—Erection and completion of 54 houses, for the Town Council. Borough Engineer and Surveyor, Town Hall, Whitehaven. Dep. £1 1s.

Jan. 24.—**Glin.**—Electric Lighting.—Installation in St. Joseph's Orphanage, Glin, County Limerick, for Committee. McEntee and O'Kelly, Consulting Engineers, 23, Upper O'Connell-st., Dublin. Dep. £2 2s.

Jan. 25.—**Coulsdon and Purley.**—Store.—Convenience and store at Rotary Field, Brighton-rd., Purley, for U.D.C. G. A. Ballard, S. Dep. £1 1s.

Jan. 31.—**Dublin.**—Reconstruction.—Of North block of Four Courts, for Commissioners of Public Works. T. Cassedy, secretary, Dublin. Dep. £1.

✱Feb. 3.—**Rochester.**—Houses, etc.—Erection, drainage and site works, etc., of 75 houses (7 parlour and 68 non-parlour), for the Corporation. William Law, A.M.I.C.E., City Surveyor, Guildhall, Rochester. Dep. £3 3s.

✱February 9.—**Stepney.**—Wells, etc.—Construction of wells, caissons in River Thames, circulating water tubes, etc., at Limehouse Electricity Generating Station, Narrow-st., E., for the B.C. of Stepney. B.E., Bernard J. Belsher, M.I.C.E., M.I.M.E., Municipal Offices, Raine-st., E.1, between 10 a.m. and noon. Dep. £10 (Treasury notes).

Feb. 25.—**Egypt.**—Excavation.—Of approximately six and a half millions cubic metres of earthwork in the remodelling of the Fouadia Canal in Naghamadi district, Upper Egypt, for Ministry of Public Works.

——.—**Buxton.**—House.—Also shop, West-rd. C. Flint, L.R.I.B.A., architect and surveyor.

——.—**Cupar.**—House.—Roadman's house at Parbroath, for Cupar District Committee. Walker and Pride, architects, Church-sq., St. Andrews. Dep. 10s. 6d.

——.—**Doncaster.**—Stores.—In Carr House-rd., for Doncaster Mutual Co-operative and Industrial Society, Ltd. T. H. Johnson, architect, 20, Priory-place. Dep. £5.

——.—**Llanpumpsaint, etc.**—Stores.—At Llanpumpsaint and Cwmmawr, for Carmarthen Farmers' Co-operative Society, Ltd. J. H. Morgan, architect, 24, King-st., Carmarthen.

——. — **Mansfield.** — Enlargement. — Of Grand Theatre. J. Tomlinson, architect, Victoria-st., South Normanton, Dep. £5.

——.—**Prescot.**—Painting.—Also decorating interior of 28 houses at "The Wood," for U.D.C. A. Gregson, engineer and surveyor, 2, West-st.

MATERIALS, ETC.

Jan. 9.—**Hertford.**—Road Materials.—For T.C. R. Battersby, T.C.

Jan. 9.—**London.**—Highway Materials.—For St. Pancras B.C. E. W. Swinstead, B.E. and S.

Jan. 10.—**London.**—Iron and Steel Goods.—For G.W.R. F. R. E. Davis, secretary, Paddington Station, W.2.

Jan. 12. — **Cheadle and Gatley.** — Highway Materials.—For U.D.C. J. Fothergill, E. and S.

Jan. 12.—**Hastings.**—Granite.—1,000 tons, for R.D.C. S. Bumstead, clerk, 11, Wellington-sq.

Jan. 12.—**Hornsey.**—Road Materials, etc.—For T.C. W. H. Adams, B.E. and S.

Jan. 14.—**Worthing.**—Stone, etc.—For T.C. J. Kennedy Allerton, T.C.

Jan. 16.—**London.**—Builders' Materials. — For Camberwell B.C. W. Bell, B.E. and S.

Jan. 16.—**Plymouth.**—Granite Kerb.—For C.B. J. Wibberley, A.M.Inst.C.E., Borough Engineer, Surveyor and Architect.

Jan. 21.—**West Riding.**—Road Materials.—For C.C. C.S., Wakefield.

Jan. 23.—**Devon.**—Highway Materials.—For C.C. F. E. Simpson, C.S., No. 2 Division, 21, Southernhay West, Exeter.

Jan. 23.—**Essex.**—Highways Materials.—For C.C. Wm. H. Morgan, C.S.

Jan. 24.—**Southall-Norwood.**—Highway Materials. —For U.D.C. J. B. Thomson, E. and S.

Jan. 31.—**Durham.**—Road Materials.—For C.C. W. J. Merrett, C.E. and S., 43, Old Elvet, Durham.

Feb. 8.—**Middlesex.**—Road Materials.—For C.C. A. Dryland, C.E.

ENGINEERING, IRON AND STEEL.

Jan. 9.—**Bairothery.**—Water Supply.—Laying 2,513 lin. yds. of 3-inch., and 2,027 lin. yds., of 4-inch cast-iron water mains, with other work incidental thereto, for the purpose of providing a water supply for Portmarnock, for R.D.C. P. H. McCarthy, 26, Lower Leeson-st., Dublin.

Jan. 9.— **India.** — Bridgework. — For Director-General, India Store Department, Branch No. 11, Belvedere-rd., S.E.1.

Jan. 15.—**Cairo.**—Reservoir.—Supply and installation at town of Luxor of a steel reservoir of 300 cubic metres capacity on a steel framework tower, together with the necessary steel piping and fittings, as well as a water-level indicator, for Ministry of Interior. Department of Overseas Trade, 35, Old Queen-st., S.W.1. (Ref. A.X.5652.)

Jan. 20.—**London.**—Steelwork.—For bridges, for South Indian Railway Co., Ltd. Robert White & Partners, consulting engineers, 3, Victoria-st., S.W.1.

Jan. 23.—**Wirral.**—Reservoir.—Covered concrete service reservoir on top of hill at Heswall, in the Wirral Peninsula near the existing water tower of the Board, and comprising excavation and forming embankments, concrete, plain and reinforced, fixing of ironwork, etc., for West Cheshire Water Board. G. H. Hill & Sons (Manchester), Civil Engineers, 40, Kennedy-st., Manchester. Dep. £2 2s.

Feb. 23.—**Newry.**—Bridge.—Single-leaf steel swing bridge over canal at Godfrey Bridge, for U.D.C. C. Blaney, Town Surveyor. Dep. £1 1s.

ROAD, SEWERAGE, AND WATER WORKS.

Jan. 9. — **Birmingham.** — Mains. — Laying, etc., mains and services for distribution of town's gas, for T.C. A. W. Smith, General Manager and Secretary, Gas Department. Dep. £2 2s.

Jan. 9.—**Erith.**—Making-up.—Eardley-rd., Belvedere, for U.D.C. H. Hind, E. and S. Dep. £1 1s.

Jan. 10.—**Acton.**—Road.—Construction of town planning road No. 1 (part only) and town planning road No. 3, for T.C. B.E. Dep. £2 2s.

Jan. 10.—**Enfield.**—Sewers.—About 1,280 yds., lin., of 9-in. stoneware pipe sewer, together with necessary manholes and other incidental works, at rear of west side of Cockfosters-rd., Hadley Wood, for U.D.C. H. R. Crabb, E. and S. Dep. £2 2s.

Jan. 10.—**Sutton.**—Making-up.—Pelton-av., 220 lin. yds., Aultone way, 565 lin. yds., Greenhill, 300 lin. yds., and Woodend, 420 lin. yds., for U.D.C. W. H. Grieves, S. Dep. £3 3s.

Jan. 11.—**Chesterfield.**—Sewerage.—Sewers and sewage disposal works in vicinity of Woodhouse-lane and Queen's-rd., Beighton, for R.D.C. H. Taylor, E.

Jan. 11.—**Merton and Morden.**—Making-up.—Grand-drive, from Approach-rd. to Bushey-rd. (approximate length 200 yards), for U.D.C. G. Jerram, S. Dep. £2.

Jan. 11.—**Swansea.**—Culvert.—713 yds., flood relief culvert in King Edward's-rd., for C.B. J. R. Heath, Chief Engineer. Dep. £5 5s.

Jan. 11.—**Swansea.**—Sewer.—8,843 yds., of sewers, for C.B. J. R. Heath, Chief Engineer. Dep. £5 5s.

Jan. 11.—**Tottenham.**—Drainage.—Road and drainage at Tottenham Cemetery, Tottenham N., for Tottenham and Wood Green Burial Board J. C. S. Mummery, architect, 34, Bloomsbury-sq., W.C.1.

Jan. 11.—**Wembley.**—Improvements. — Widening and improvement of part of Preston-rd., for U.D.C. C. R. W. Chapman, E. and S. Dep. £2 2s.

Jan. 12.—**Hornsey.**—Sewerage.—Sewer and drainage work, for T.C. W. H. Adams, B.E. and S.

Jan. 12.—**Northwich.**—Mains.—Laying of approximately 28 miles of cast-iron mains, 8-in., 6-in., 5-in., 4-in., and 3-in. diameter, and 13 miles of galvanised water tubes from 2-in. to ¾-in. diameter, and other incidental works, in connection with water schemes, for R.D.C. J. Birtwistle, E. and S., Winnington-st. Dep. £2 2s.

Jan. 14.—**Kirkcaldy.**—Roads.—For (1) supplying and laying fireclay drainage pipes at (a) Massereene-rd., site, and (b) Invertiel-rd., site; (2) forming streets at (a) Massereene-rd., site, and (b) Invertiel-rd., site, for T.C. B.S.

Jan. 14.—**Plymouth.**—Roads.—Ballasting, etc., of nearly a mile of roads, and the construction of about 2½ miles of sewers, etc., on H Site, No. 4 Section, of the North Prospect Housing Scheme, for C.B. J. Wibberley, B.E., S. and A. Dep. £2 2s.

Jan. 16.—**Beckenham.**—Road.—Reconstruction of Rectory-rd., for U.D.C. H. Storr Best, S. Dep. £2.

Jan. 16.—**Beddington and Wallington.**—Roads.—Road and sewers in connection with housing scheme at Bute-rd., estate, Wallington, for U.D.C. S. F. R. Carter, E. and S. Dep. £2 2s.

Jan. 16.—**East Barnet.**—Sewer.—For (*a*) Station-rd.: 163 yds. (about) 9-in. surface-water sewer; 187 yds. (about) 9-in. soil sewer; (*b*) Church Hill-rd.: 121 yds. (about) 9-in. surface-water sewer, for U.D.C. H. York, E. and S. Dep. £1 1s.

Jan. 16.—**Loughborough.**—Main.—Providing and laying about 1½ miles of 15-in. spun cast-iron pipes from Nanpanton to Loughborough, for Corporation. G. & F. W. Hodson, Consulting Engineer, Bank-chambers. Dep. £5 5s.

Jan. 16.—**Ruislip-Northwood.**—Widening.—Also reconstruction of section of Pinner-Rickmansworth-rd., (A.404), between Joel-st. and the Hendon R.D.C. boundary, for U.D.C. H. R. Metcalfe, E. and S. Dep. £5.

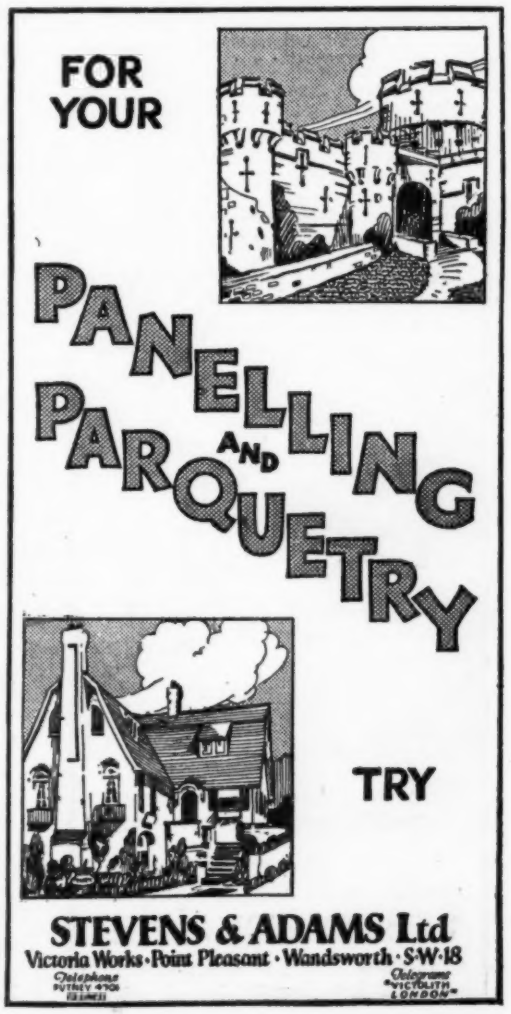
Jan. 16. — **Southend-on-Sea.** — Making-up. — Also sewering of Marine-parade, Leigh, extension, and Thames-drive, Leigh, and incidental works, for C.B. R. H. Dyer, B.E. and S. Dep. £2.

Jan. 16.—**Southend-on-Sea.**—Sewers.—Construction of (*a*) approx. 2,500 yds. of 9-in. dia. and approx. 300 yds. of 12-in. dia. stoneware pipe sewers, and (*b*) small span concrete and steel bridge over brook, Pavilion-drive, and incidental works, for C.B. Robert H. Dyer, B.E. and S. Dep. £3.

Jan. 16.—**Waltham Holy Cross.**—Sewer.—Shallow 6-in. sewer from Upshire to the Wake Arms, about 1,980 yds. in length, for U.D.C. W. C. Holloway, E. and S.

Jan. 17.—**Brighton.**—Mains.—9-in. and 6-in. stoneware pipe sewers, 4-in. cast-iron rising main (approximate length 340 yds.), erection of ejector plant, and other incidental works, at Mental Hospital, Haywards Heath, for C.B. D. Edwards, B.E. and S. Dep. £2 2s.

Jan. 17.—**Highbridge.**—Improvements.—Diverting, widening, and resurfacing Highbridge and Burnham-on-Sea-rd., for U.D.C. E. J. McKaig, A.M.I.C.E., engineer, Weston-super-Mare. Dep. £2 2s.



Jan. 17.—**Sowerby.**—Making-up.—Vale-st., for U.D.C. J. Eastwood, S.

Jan. 18.—**Cheadle and Gatley.**—Improvements.—To Cheadle-rd., for U.D.C. S.

Jan. 18.—**Minehead.**—Piping.—15,000 lin. yds., of 10-in., 9-in., 8-in. and 6-in. pipes, for U.D.C. A. P. I. Cotterell & Son, engineers, 54, Victoria-st., Westminster, S.W.1. Dep. £5 5s.

Jan. 19.—**London.**—Sewer.—300 feet of 4-ft. by 2-ft. 8-in. brick sewer (mostly in tunnel) and contingent works beneath New-st., Middlesex-st., for Corporation. City Engineer, Portland House, Basinghall-st., E.C.2. Dep. £2 2s.

Jan. 19.—**Rugby.**—Sewers.—Surface water sewers on Walding's estate, and completion of roads and footpaths on Brown's and Walding's estates, for Benefit Building Society. H. Dale, 6, Warwick-row, Coventry. Dep. £2 2s.

Jan. 21. — **Brierfield.** — Making-up. — Certain streets, for U.D.C. W. D. Haigh, E. and S. Dep. £2 2s.

Jan. 21.—**Crompton.**—Footpaths. — Constructing carriageway and footpaths of Longley-st., approximate length 180 yds., and constructing concrete foundation for carriageway and footpaths of Napier-st., approximate length 126 yds., for U.D.C. F. T. Jones, E. and S.

Jan. 21.—**Crompton.**—Foundations.—Laying of approximately 882 sq. yds., of mastic asphalt on a prepared concrete foundation in Napier-st., for U.D.C. F. T. Jones, E. and S.

Jan. 23.—**Mickleover.**—Mains, etc.—Provision of mains, etc., in connection with hospital extensions at Mickleover, for Derby County Mental Hospital Committee. Edwards and Shaw, engineers, 105, Colmore-row, Birmingham. Dep. £1 1s.

Jan. 23.—**Romford.**—Improvement.—Widening to 50 ft. and reconstructing St. Mary's-lane, from Bell Hotel, Upminster, to Railway Bridge, Cranham, a distance of about 1,300 yds., for R.D.C. W. J. Grant, S. Dep. £2 2s.

Jan. 24.—**Salford.**—Sewerage.—In Great Clowes-st., for T.C. City Engineer.

Jan. 25.—**Birmingham.**—Sewer.—4,244 yds., of brick and concrete culverts and stoneware pipe sewers, together with other incidental works in private lands and in Berkeley-rd., Coventry-rd., Waterloo-rd., Church-rd., Harvey-rd., etc., at Hay Mills and South Yardley, for T.C. H. H. Humphries, City E. and S. Dep. £2.

Jan. 30.—**Woking.**—Making-up.—Park-rd., (East), length 770 yds., approximately; Park-rd., (West), length 303 yds., approximately; Thornash-rd., length 300 yds., approximately; Manor-rd., length 140 yds., approximately; Horsell-rise, length 380 yds., approximately; for U.D.C. G. J. Wooldridge, E. and S.

Jan. 31.—**Epsom.**—Sewers.—Iron and stoneware pipe sewers, manholes, etc., in Rookery Hill, Farm-lane and Park-lane, Ashtead Park estate, for R.D.C. F. A. Pratley, S.

Feb. 7.—**Deptford.**—Pumping Machinery.—At the Deptford pumping station, Brookmill-rd., Deptford, London, S.E.8, for M.W.B. Chief Engineer's Department (Room 173), 173, Rosebery-av., E.C.1. Dep. £3 3s.

Feb. 21. — **New Zealand.** — Deviation. — Construction of Wellington-Tawa flat deviation, Wellington-New Plymouth Railway, for Public Works Dept., Wellington. Commissioner for New Zealand, 415, Strand, London, W.C.2.

Competitions.

(*See Competition News, p. 4.*)

Auction Sales, Tenders, etc.

Jan. 11.—**Canterbury, Kent.**—Charles R. Davis and Co. will sell, by order of the liquidator, in voluntary liquidation, re R. P. Davis and Co., Ltd., at the Vauxhall Brickworks, Sturry-rd., Canterbury, the whole of the builders' and contractors' stock-in-trade, plant and machinery. Auctioneers, 285, Borough High-st., London, S.E.1.

✱Jan. 17.—**London.**—Joseph Hibbard & Sons will sell without reserve (by order of G. W. Beale, Esq., who is retiring from business, having sold the premises), at 505a, Cambridge-rd., builders' stock, etc. Auctioneers, 15, Newington-green, Islington, London, N.16.

✱January 19.—**Essex.**—Farebrother, Ellis & Co. will sell, at the Eagle Hotel, Snaresbrook, four blocks of freehold building land, about one acre each. Auctioneers, 29, Fleet-st., E.C.4, and 26, Dover-st., Piccadilly, W.1.

✱At an early date.—**Windsor.**—Knight, Frank & Rutley will sell in blocks or in numerous lots (unless disposed of privately), by direction of the Council of the Imperial Service College Trust, freehold building land on the western fringe of the Royal Borough. Auctioneers, 20, Hanover-sq., London, W.1.

Public Appointments.

Jan. 12.—**Birmingham.**—Architectural Assistant required by the City Council. Chief Education Officer, Education Office, Margaret-st., Birmingham.

✱Jan. 21.—**Staffordshire.**—Architectural Assistant. —Required by the Staffordshire Education Committee. Architect, County Education Offices, Stafford.

✱January 24.—**Manchester.**—Resident Clerk of Works.—Required at the Manchester Infirmary. Gen. Supt. and Sec.

✱January 30.—**London.**—Housing and Town Planning Inspector.—Required by the Ministry of Health. Director of Establishments, Ministry of Health, Whitehall, S.W. on prescribed form.

PROPOSED NEW BUILDINGS & OTHER WORKS*

In these lists care is taken to ensure the accuracy of the information given, but it may occasionally happen that, owing to building owners taking the responsibility of commencing work before plans are finally approved by the local authorities, "proposed" works at the time of publication have been actually commenced. Abbreviations: T.C. for Town Council; U.D.C. for Urban District Council; R.D.C. for Rural District Council; E.C. for Education Committee; B.G. for Board of Guardians; B.C. for Borough Council; P.C. for Parish Council; M.H. for Ministry of Health; M.T. for Ministry of Transport; C.B. for County Borough; B. of E. for Board of Education; M.A.B. for Metropolitan Asylums Board; and M.W.B. for Metropolitan Water Board; Borough Surveyor, B.S.; Borough Engineer, B.E.; District Surveyor, D.S.; Clerk, C.; Town Clerk, T.C.; County Engineer, C.E.; County Surveyor, C.S.; County Architect, C.A.; Surveyor, S.; Engineer, E.; Borough Architect, B.A.; Architect, A.

Acton.—A big area of ground near Acton Green, known as Brown's Yard, has been sold to make room for an up-to-date petrol station.

Altofts.—Upper Altofts Wesleyan Chapel trustees are about to proceed with Sunday school premises at £1,000.

Altrincham.—Proposed to erect a new Church House for St. Alban's at Broadheath, estimated to cost £4,500.

Armagh.—City Council instructed surveyor to prepare plans for fire brigade station.—Infirmary Governors received letter from C.C. stating, with reference to proposed alterations and additions to infirmary that estimate amounted to £10,000.

Bath.—T.C. are to purchase land from G.W.R. for improvement scheme at Dolesmeads.—Council are considering scheme for proposed erection of abattoir.—Scheme for 36 additional houses at Newbridge-rd. is being proposed.—M.H. sanction £1,200 for sanitary convenience and raising height of western boundary wall at Combe Downe Pleasure ground. Tenders are to be invited.—B.E. has approved proposed transfer of handicraft centre to the Corn Market building and that alterations at the training college will be necessary when the change is affected.

Bakewell.—H. J. Shepard, architect, Town Hall Chambers, Sheffield, prepared plans for rebuilding Bull i' th' Bush licensed house on Ashbourne-Buxton road.

Ballymena.—U.D.C. are to prepare scheme of from 30 to 60 houses.

Ballymoney.—North Antrim Regional Education Committee decided to build a new school at Polintamney.

Barnes.—L.C.C. are building 613 houses and 18 new roads on Castelnau housing estate.

Becontree.—Essex E.C. recommend £640 for fencing and tarpaving work at Green-lane Council school.

Beddington and Wallington.—U.D.C. approved plans for East-av., and The Chase, 9 houses, for J. Gibson, 56, Caithness-rd., Mitcham.

Belfast.—Plans approved by City Surveyor:—20 houses, Fallswater-st., T. Maquire: architect, S. J. McAvoy; 3 houses in Kitchener-st., for T. McKee: architect, C. A. Aicken; shops, offices and stores, Donegall-st., A. E. Savage: architect, T. R. Eagar: 3 houses, Sandown-rd., R. J. Bell; 2 villas, Kineadar-crescent, Smyth and McKeen: architect, W. R. Rogers.

Belmullet.—Mayo County Board of Health passed resolution that Ministry of Local Government be asked to take immediate steps to re-establish the hospital.

Birmingham.—T.C. have given notice of their intention to sanction following:—Temporary sports pavilion in Stratford-rd., Robin Hood; extension to omnibus garage at junction of Spring-rd. and Fox Hollies-rd., Acock's Green; cinema hall in Westley-rd., Acock's Green; sports pavilion between Queen's-ride and Pershore-rd., Cannon Hill; 72 flats, garages and sports pavilion on Maplehurst estate, Hobmoor-rd., Yardley; additions to King's Head public house, corner of Lordswood-rd. and Hagley-rd.; 6 lock-up motor-houses off Aubrey-rd., Harborne.

Black Notley.—Essex C.C. recommend £78,873 for erection of sanatorium and memorial hall.

Blackpool.—Savoy Hydro, Ltd., are proposing extensions to their buildings, which will provide a garage for 150 motor-cars. Plans by Hindle & Waterhouse, 5, Cedon-st.

Blaydon.—U.D.C. approved plans for a Welfare Hall for the Blaydon Burn Welfare Organisation.

Bolton.—T.C. passed plans:—Lloyds Bank, Ltd., bank premises, Deansgate and Howell-croft; Bolton Eagle Spinning Co., Ltd., for sanitary accommodation, Eagle Mills, Rasbottom-st.; A. S. Woods, 6 houses, Albert-rd. West, and 6 houses, Kingwood-av.

Boston.—R.D.C. are to ask M.H. to sanction erection of 10 houses.

Bradford.—T.C. recommend £128,896 for various relief works.—Corporation are proposing to purchase from Dudley Hill Colliery Co. about 31 acres of land on easterly side of Bierley housing estate, for £1,500.—E.C. decided to recommend that site for new school be reserved on Eccleshill housing site.—Sub-Committee decided to recommend to the Housing Sub-Committee that a portion of level ground abutting upon Haworth-rd., and situate on Chellow Grange housing site, be reserved for purpose of building elementary school.—M.H. sanctioned borrowing of £21,483 required for erection and equipment of proposed new elementary school at Bierley.—It has been decided to recommend that the Sites, Works and Finance Sub-Committee take into consideration question of adaptability for Technical College purposes of premises in Great Horton-rd., now occupied as a school clinic, and of provision of further accommodation required at College of Art and Crafts.—Markets Superintendent submitted estimate amounting to £150 received from City Electrical Engineer for installation of electric lighting in Butchers' Section of Rawson Place Market.—Scheme is to be considered with reference to proposal to provide joint baths and library premises in Listerhills Ward.—M.H. approved proposal of Council to proceed with erection of 366 houses on Eccleshill site.—M.H. given formal sanction to borrowing by T.C. of £5,662 for erection of 12 working-class dwellings at Thornton.—Plans passed by Council for houses: E. Balmforth & Sons, Hastings-av., 6; Foster Bros., Lynton-villas, 4; Briggs & Hellewell, Moore-av., 10; Eccleshill Real Estate Co., Lodore-av., 6; F. P. Leach & Sons, Whitby-rd., 9; A. Robinson, Kingston-grove, 11; T. R. Robinson, Carr House-gate, 4; W. W. Rawnsley, Leaventhorpe-lane, 4; F. Wray, Poplar-grove and Moore-av., 11; A. W. Cooke, Florida-rd., 4; H. Procter, High Park-grove, 6; J. A. Groves, Briarwood-drive, 4; A. & J. Chippindale, Thorn-av., Thorn-grove, Thorn-lane and Haworth-rd., 10; R. R. North & Co., Harrogate-rd., 18; W. Farrer, Wellington-grove, 8; F. Dalby, Bolton-lane, 4; Heaton (Bfd.) Estates Co., Wheatlands-drive, 10; H. Sugden, Son & Co., Ashbourne-gardens, 10; J. E. Keighley, Cyprus-drive, 2; A. Dickinson, Victoria-av., 4.

Braintree.—Essex E.C. are to erect new junior school at Chapel Hill Council school at £7,200.

Bredbury.—Bredbury and Romiley U.D.C. propose to erect further 84 houses on George-lane site.

Brentwood.—Cycle and tool sheds are to be erected at County High school, for Essex E.C.

Bromley.—T.C. sanctioned plans for 3 houses, Bourne-rd., for E. Tyler, and 4 houses, South View, for H. A. Pierpoint.

Buttsbury.—Essex E.C. recommend purchase of site for proposed Council school.

Cahirciveen.—Kerry C.C. applied to Ministry of Local Government and Public Health for loan of £1,125 for building Cahirciveen-bridge.

Chapel.—R.D.C. received sanction to borrow £3,720 for 8 houses in Ashbourne-lane.

Charlton Kings.—U.D.C. agreed to 26 houses on surplus land at Croft-gardens.

Chertsey.—Housing Committee of U.D.C. adopted lay-out plan for erection of 50 additional houses at Pyrcroft-rd.

Chorley.—T. C. approved plans for 91 houses, Oak-av., Lime-grove and Ash-grove, off Pilling-lane, for C. W. Norris, Farnworth.

Colchester.—Repairs are to be carried out at 14, Beverley-rd., at £108, for Essex E.C.

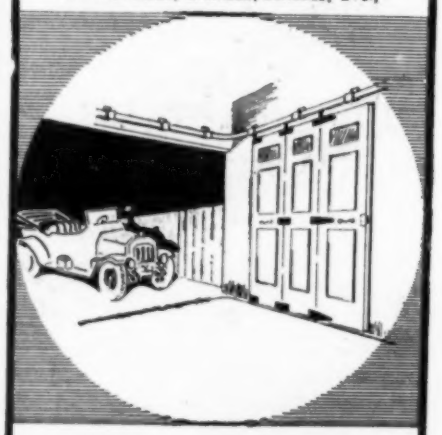
Coventry.—R.D.C. approved erection of 26 houses in Humber-rd., for Ives and Rushby.

Doverney Bridge.—Ministry approved plans for new school, and Regional Committee decided to ask C.C. to sanction loan of £2,100.

"HENDERSON"

SLIDING DOOR GEAR

FOR FACTORIES, GARAGES, SCHOOLS, ETC.,



"TANGENT JUNIOR" FOR LIGHT DOORS
"TANGENT SENIOR" FOR HEAVY DOORS.

WRITE FOR BOUND CATALOGUE B.26 TO:-

P.C.HENDERSON, LIMITED,

TANGENT WORKS, BARKING, ESSEX.

Dukinfield.—Town Lane Baptists propose to erect Chapel and Sunday school on a site off Oxford-rd.

Ealing.—T.C. passed plans: 7 shops, W. Hurst, Ruislip-rd., Greenford, and 5 by Usher's Wiltshire Brewery, Ltd, in Greenford-rd.

East Barnet.—U.D.C. approved plans of 14 houses in Cat Hill, for W. C. Leak & Sons.

East Thurrock.—At £2,610 Essex E.C. recommend enlargement of Council school.

Erith.—U.D.C. sanctioned plans for 7 motor garages and 4 motor-cycle garages at rear of "Sandbank," Bedonwell-rd., for G. R. Luck, and 25 houses (5 in Lesney-park-rd., 14 in Lesney-park and 6 in Avenue-rd.) for H. Friday & Sons; F. W. Pamlin, architect.

Farnborough.—U.D.C. received approval from M.H. to erect an additional 40 houses.

Flixton.—W. Sharratt, Ltd., Church-lane, Wolverhampton, proposes to erect 50 houses off Irlam-rd.

Galway.—Ports and Harbour Tribunal stated that a loan of £130,000 will be necessary for improvement of the port.

Grays.—Essex E.C. recommend £39,000 for erection of Grays Palmer's Endowment School for Girls.

Hailsham.—R.D.C. are to erect 20 more houses.

Harold Court.—Essex C.C. recommend £348 for erection of dairy.—New junior school, estimated to cost £7,931, has been recommended by Essex E.C.

Heston and Isleworth.—U.D.C. recommend, subject to approval of B. of E., negotiations be entered into with Lord Jersey's Trustees for acquisition of four and one-third acres of land adjoining Heston Recreation Ground, for purpose of enlarging site already scheduled for proposed new school at Heston.—Plans passed: Leonard Stokes & Drysdale, church, Bath-rd.; F. W. Ferris, 10 houses, Burlington-rd.; R. T. Warren, 44 houses, new road off Westbrook-rd.; J. Jefford, 4 houses, Victoria-av.; P. Chase Gardener & Co., 6 houses, Heath-rd.; W. Hayne, Baptist church, High-st.; C. Burwell, 3 houses, Albion-rd.; Moorman Word & Co., 40 houses, new road, Osterley; P. Chase Gardener & Co., 30 houses, new road off Vicarage Farm-rd.; J. H. Bolton, 43 houses, London-rd., and Twickenham-rd.; F. J. Pateman, 6 flats, Station-rd.; F. J. Pateman, hall, Grove-rd.

Holywood.—U.D.C. decided to proceed with electricity scheme on basis of report from W. Pleasance.

Ilford.—T.C. passed plans:—H. Smith, 3 houses, 46/50, Somersby-gardens; Wakeling & Smith, 10 houses, 72/90, Bute-rd.; Suburban Developments, Ltd., amended plan of 21 houses, 2/22, Yoxley-drive, 1/19, Springfield-drive, also 8 shops and dwellings, 1/4, Newbury-parade, 7/10, Newbury-parade, Ley-st.; Clemens Bros., garage for Harrison Gibson, Ltd., adjoining depository, Ley-st.; F. B. Harrison, 8 houses, 26/40, Windermere-gardens; S. A. S. Yeo, 6 cottages, 1/6, Plough-cottages, Ilford-lane; Suburban Developments, Ltd., 10 shops and dwellings, 1/5, Joinant-parade, Eastern-av., and 8/12, Joinant-parade, Horns-rd.; E. Meredith, 14 houses, 1/10 and 19/22, Grove-gardens, Grove-rd.; Haines & Warwick, houses and garages, 1/25 and 2/26, Kings-gardens, and garage at 364, Ley-st.; H. W. Christophers, 6 houses and garage, 22/32, Hamilton-av.—Corporation are to build 120 houses on a new estate at Tomshill.

Keighley.—Site been acquired upon which it is proposed to erect New Drake and Tonson's secondary school.

Kirk Ella.—Movement is on foot for Parish Hall.

Larne.—Ministry of Home Affairs approved Guardians' proposal to convert a disused workhouse building into general district hospital.

Leeds.—Application is to be made to M.H. for sanction to borrowing of following sums:—£2,505 for fencing on land acquired from Lord Airedale and G. Ratcliffe and round old well and bath in the Gledhow Valley, and £39,955 required in connection with carrying out of following scheme approved by General Purposes Committee:—Construction of section of Ring-rd., from Elland-rd. to Dewsbury-rd., including the widening of Elland-rd.; construction of a new bridge under L. and N.E.R., and construction of new culverts, and loop road to Dewsbury-rd.—Sanction been received from M.H. to £32,000 for houses on Harehills Lane estate; £2,900 for extension of recreation ground at Crossgates, and £1,550 for repair of Kirkstall Abbey Ruins.

Leyton.—Essex E.C. recommend £49,979 for erection of new boys' school.

Loughton.—Essex E.C. recommend enlargement of County High School for Girls at £18,180.

Manchester.—Manchester Abattoirs are to be extended. The Corporation given instructions for scheme to be prepared.

Mansfield.—Convalescent Home Committee decided to sell to Corporation portion of their land at Berry Hill for an open-air school.

Northampton. — C.B. recommend Borough Engineer invite tenders for 16 houses.—C.B. resolved that Ministry be asked to approve erection of tenements and issue their sanction to a loan for erection on Abingdon site.—Application is to be made to M.H. for sanction for loan of £42,313 for road and sewer works on Kingsthorpe St. David's site.—B.E. is to invite tenders for erection of 27 houses fronting Baring-rd.—Plans passed:—5 combined houses and shops, Weedon-rd., A. P. Hawtin & Sons, Ltd.; 4 houses, Main-rd., Far Cotton, J. G. Pullen & Son; warehouse and alterations, Pine-st. works, Impress Leather Co.

Nottingham.—City Council decided to build a crematorium.

Omagh.—Inquiry has been held into application of U.D.C. for loan of £6,700 for purpose of erecting 24 working-class houses.

* See also our List of Contracts, Competitions, etc.

Plymouth.—Housing Committee of T.C. approved lay-out of further section of land at North Prospect with provision of 237 non-parlour houses.—Plans also approved, and will be submitted to M.H., for housing small families at Parkside, Ford.

Preston.—Plans been passed by T.C. for Buck & Abbott, 33 houses, Southern-parade and Southern-av.

Retford.—W. Southall, L.R.I.B.A., Chapelgate, prepared plans for rebuilding "The Half Moon," Town Hall-yard, for Worksop and Retford Brewery Co., Ltd.

Romford.—Essex E.C. recommend £580 for adaptation of hut and re-instatement of classrooms at special school.—Essex E.C. recommend £1,685 for 3 additional classrooms at London-rd. Council school.—A sum of £721 is recommended also by E.C. for enlargement of Mawney-rd. Council school.

Sale.—Lancs E.C. are proposing to erect High School for Boys on land off Derbyshire-rd.

Salford.—C.B. propose to borrow £38,658 to cover cost of provision of, and alterations to, switchgear at Agecroft Power Station and erection and equipment of sub-stations in the City of Salford and U.D. of Prestwich.—Health Committee recommend Council to proceed with erection of a Maternity and Child Welfare Centre on land at junction of Landseer-st. and Markendale-st., at £3,700.

Scalby.—Plans been approved for 16 houses on Newlands estate, for Dawson & Wilkinson.

Scarborough.—T.C. approved amended plan for 227 houses on Northstead estate.

Sheffield.—Sutton trustees are proposing to erect a further 170 houses at Walkley district.—W. J. Hale, F.R.I.B.A., 13, St. James'-row, been appointed to prepare plans for new Wesleyan Church at Bents Green. The edifice is estimated to cost £7,000 and will have seating accommodation for 400.—Committee of Primitive Churches in Sheffield district has given sanction for erection of a church at Caster Knowle.

Silver End.—A sum of £10,000 is recommended by Essex E.C. for erection of Council school.

Smethwick.—B.E. submitted to C.B. amended lay-out of Old Chapel estate, which provided for erection of 494 houses, of which 90 would be of parlour type and 404 of non-parlour type, and Council resolved that such amended lay-out be approved, and B.E. be instructed to proceed with erection of 130 houses by direct labour.—Council also resolved that, subject to approval of M.H., Council purchase from W. B. Holt, for housing purposes, a piece of land situate between Halfordslane and Middlemore-rd., and consisting of approximately 14½ acres.—Borough Engineer and Architect has prepared final plans for submission to B. of E. for school, estimated to cost £7,736. Work will be carried out by direct labour.—Director of Education has been instructed to issue the statutory notice advertising the Committee's intention to build a new school on Old Chapelry estate to accommodate about 1,500 children.—Plans passed: 7 motor garages at rear of 285, St. Paul's-rd., for E. E. Brown; 11 houses at Marion-rd., for Strong Bros.

Southend-on-Sea.—M.H. sanctioned borrowing by T.C. of £16,876 for acquisition of land at Eastwood-lane for education, housing, allotments, etc. Estimated cost of construction of roads, bridges, and sewers in connection with proposed lay-out of estate is £25,640.—Housing and Properties Committee recommended that application be made for sanction to a loan of £18,223 for sewers and construction of roads; further, that Ministry be asked to approve erection of 106 houses and 12 flats and to sanction the borrowing of £59,800 for purpose.

South Molton.—Guardians are to have detailed plans prepared for extensions to Institution, estimated to cost £2,000.

Spenborough.—U.D.C. are seeking borrowing powers to carry out additional housing scheme.

Staines.—R.D.C. passed plans:—3 pairs of cottages, Bath-rd., Sipson, F. Wakeman; 5 shops, High-st., Harlington, P. Chase Gardener.—M.H. sanctioned tender of Sandell and Wren for borrowing £6,000 for 14 houses at Ashford Common.

St. Neots.—H. Kelsall Armitage, 130, Haverstockhill, London, prepared plans for Primitive Methodist Church at Synesbury, for trustees. Bills of quantities by T. Sumner Smith, Clifton Lodge, Victoria-park, Manchester.

Swansea.—Daniel Griffiths is to erect 5 houses on the Cwmgwyn estate. Sidney Davies is to build dwelling houses on land at Cockett-rd. The C.B. has granted a lease of a plot of land at Townhill to the Townhill and Mayhill Tenants' Association for erection of institution. A building lease has also been granted to Thomas Thomas for rebuilding Blue Bell Inn, Carmarthen-rd. Permission has been granted to James Bailey to demolish and re-erect building on 202-3, Carmarthen-rd. Borough Engineer is to prepare plans for a convenience at Caswell.

Tilbury.—Additional £100 is recommended by Essex E.C. for electric lighting at St. Chads Council school.

Twickenham.—B.C. agreed to preparation of scheme for provision of baths and washhouses on Mereway depot.

Wanstead.—Cycle shed, at £124, is to be erected at County High school, for Essex E.C.

Warrington.—Warrington Co-operative Society, Ltd., have acquired land and buildings in Sankey-st. for site on which to make extensions to central premises. Plans are in course of preparation in the Architects' Department, Co-operative Wholesale Society, Ltd., 1, Balloon-st., Manchester.

Yeovil.—R.D.C. decided to submit to M.H. for provisional approval proposals for erection more houses, as follow:—Barwick, 12; East Colner, 12; Hardington, Mandeville, 4; Haselbury Planchnett, 8; Matlock, 4; Montacute, 12; and Tintinhule, 8.

NEW COMPANIES

THE particulars quoted below have been compiled by Messrs. Jordan & Sons, Ltd., Company Registration Agents, of 116 & 117, Chancery-lane, W.C.2, from the documents available at the Companies' Registry.

W. H. MATTHEWS, LTD. (224,870). Registered October 3. 241, Ryebank-road, Chorlton-cum-Hardy. Builders and contractors. Nominal capital, £5,000.

DARTFORD CONCRETE, LTD. (225,131). Registered October 17. Manufacturers of and dealers in cement products, etc. Nominal capital, £4,000.

L. TWINING & CO., LTD. (225,509). Registered November 1. 91, Alma-road, Clifton, Bristol. Sand and cement merchants, etc. Nominal capital, £6,000.

PAUL TAYLOR (BURNLEY), LTD. (225,907). Registered November 17. Arthur-street, Burnley. Joiners, builders and cabinet makers, etc. Nominal capital, £1,000.

FOSSE LIME AND LIMESTONE, LTD. (225,853). Registered November 16. 41, Bedford-square, W.C.1. Nominal capital, £7,500.

OSSETT BRICKWORKS, LTD. (225,906). Registered November 17. Pildacre Hill, Ossett. Brickmaker. Nominal capital, £100.

BRICK, LIME AND FERTILISERS, LTD. (225,884). Registered November 17. 1, Queen Victoria-street, E.C.4. Nominal capital, £5,000.

WESTERN COUNTIES JOINERY AND TIMBER CO., LTD. (225,915). Registered November 17. To take over the business of a joiner and timber merchant. Nominal capital, £25,000.

JOHN FLETCHER & DIXONS, LTD. (225,859). Registered November 16. Victoria Dock, Caernarvon. Slate slabs, enamellers and manufacturers of writing slabs. Nominal capital, £50,000.

W. G. COOPER (SLABS), LTD. (225,610). Registered November 4. 20, Beresford-road, Walthamstow, E.17. Manufacturers of slabs, tiles, building requisites and materials, etc. Nominal capital, £150.

AEROCRETE UNITS (LANCASHIRE), LTD. (225,616). Registered November 4. 24, North John-street, Liverpool. Builders and contractors, manufacturers of and dealers in concrete, aerocrete, etc. Nominal capital, £11,000.

CLARIDGE'S ASPHALTE CO., LTD. (225,583). Registered November 4. 22, Northumberland-avenue, W.C. 2. Nominal capital, £100.

MIDDLESEX CONSTRUCTION CO., LTD. (225,657). Registered November 7. R. W. Gostick, Fountain House, Hockley. Nominal capital, £100.

KERR & MCCORMICK, LTD. (225,597). Registered November 4. 7, Moor Nook, Derbyshire-road, Sale, Cheshire. Builders and contractors, etc. Nominal capital, £1,000.

MAINS ESTATES, LTD. (225,534). Registered November 2. Builders, architects and surveyors, etc. Nominal capital, £1,000.

ANGLO-CONTINENTAL CONSTRUCTION, LTD. (225,551). Registered November 3. 10, Lancaster-place, W.C.2. Builders, contractors, engineers, etc. Nominal capital, £1,000.

REG. ELLIOTT & CO., LTD. (225,604). Registered November 4. 278, Northdown-road, Margate. Builders and contractors. Nominal capital, £6,000.

T. P. JONES, LTD. (226,261). Registered December 1. Builder, contractor, ironmonger, etc. Nominal capital, £30,000.

A. BODYCOTE & CO., LTD. (226,338). Registered December 5. 123, Murray-road, Rugby. Builders' merchants, etc. Nominal capital, £8,000.

JOSHUA WOLSTENHOLME, LTD. (226,197). Registered November 29. 2, Birley-street, Blackpool. Joiners, builders and contractors, etc. Nominal capital, £500.

EDGAR HOYLE & CO., LTD. (226,276). Registered December 2. Painter and decorator. 201, Manningham-lane, Bradford. Nominal capital, £1,500.

TRADE NEWS

New London Office.

The Midland Joinery Works, Ltd., of Burton-on-Trent, have opened offices at Keith House, 133, Regent-street, W., where they intend to make a special display of their hardwood joinery which is most suitable for all kinds of high-class building and construction work.

The New Khartoum Bridge.

We learn that the wearing surface of the new Khartoum Bridge, which is being opened on January 18, by the Governor-General is of Lithocrete, a material made by the Limmer and Trinidad Lake Asphalt Co., Ltd. The material was specially manufactured in England to meet the climatic conditions, and the Limmer and Trinidad men from England carried out this work, using asphalt machinery, also manufactured in England. This is only one of the many bridges paved with Lithocrete, which, from its appearance and wearing qualities, provides an excellent form of paving for this class of work.

Sliding Fittings for Folding Doors.

The Richards-Wilcox Canadian Company, Ltd.—whose representatives in the U.K. are Messrs. E. Hill Aldam & Co., Ltd., 33, Stamford-street, S.E.1—have put on the market a bracket which is claimed to be a new development in the production of trolley track for sliding-door purposes. This bracket results, we learn, in absolute smoothness of running, as the adjoining ends of the pieces of track are bound dead flush together and locked tight on the bottom by the bracket, making what is virtually a continuous track for the whole length. The steel used is "Copper Alloy," which is, we are told, corrosion-resisting. Folders illustrative of this system are obtained from Messrs. Aldam.

Architectural Wrought Metal.

We have received from the Forge, Limited, workers in architectural wrought metal, of Hanover-street, Liverpool, a copy of a charmingly produced booklet illustrating some of their work which was on view at the autumn exhibition of the Walker Art Gallery. There are a number of illustrations of wrought iron and bronze work of genuine merit, and one we particularly like is that of Diana," a hunting scene worked into the form of a grille. The booklet will be sent upon application.

Metal Gates.

Amongst the recently erected buildings for which the Acme Metal Works (1921), Ltd., have supplied gates, etc., are the Blue Bird Garage, King's-road, Chelsea, S.W. (35 gates for entrances and lock-ups); Bottling Depot for United Dairies, Ltd., at Vauxhall, S.W. (seven gates for loading dock and entrances); Royal Exchange, Manchester (one entrance gate); Rialto Cinema, Hall Green, Birmingham (illustrated in our issue for December 30, 1927—three gates); Hay Mills Picture Theatre, Birmingham (eight gates); and Witton Lodge Schools, Erdington (18 gates).

Housing Exhibition, Edinburgh.

We learn that space for this exhibition—which is being held at the Waverley Market, Edinburgh, from February 18 to February 29—has already been booked by nearly 30 of the more important firms dealing in builders' merchandise. The organiser is Mr. T. Percy Bentley, 7, Waverley Market, Edinburgh.

Land Reclamation Scheme, Belfast.

An important scheme of reclamation has been introduced by the Harbour Commissioners, and it has been found necessary to enclose a further area of the foreshore. At a recent meeting of the Board it was decided to carry out the work and to approach the Ministry of Labour with the object of having it approved by the Government as a scheme for the relief of unemployment.

PRICES CURRENT OF MATERIALS.*

[Owing to the exceptional circumstances which prevail at the present time, prices of materials should be confirmed by inquiry.]

BRICKS, &c.

Per 1,000 Alongside, in River Thames up to London Bridge. £ s. d.

Best Stocks 4 5 6
Second Hard Stocks 3 19 6

Per 1,000. Delivered at London Goods Stations.

	£ s. d.		£ s. d.
Flettons, at King's Cross	2 14 3	Best Blue Pressed Staffs	9 5 0
Do., grooved for Plaster	2 16 3	Do. Bullnose	9 15 0
Do., Bullnose	3 8 3	Blue Wire Cuts	7 5 0
Best Stourbridge Fire Brick :—			
2½ in.	8 11 0	3 in.	10 3 0
GLAZED BRICKS—			
Best White Ivory, and Salt Glazed Stretchers	21 0 0	D'ble Str'tch'rs	29 10 0
		D'ble Headers	26 10 0
		One Side and two Ends	30 10 0
Headers	20 10 0	Two Sides and one End	31 10 0
Quoins, Bullnose and 4½in. Flats	27 10 0	Splays and Squints	28 0 0

Second Quality, £1 per 1,000 less than best. Cream and buff, £2 extra over white. Other colours. Hard Glaze, £5 10s. extra over white.

BREEZE CONCRETE SLABS.

Delivered London.

	s. d.		s. d.
2 in. per yd. super.	1 11	3 in. per yd. super.	2 9
2½ in. ,, ,,	2 4	4 in. ,, ,,	3 6

	s. d.		
Thames Ballast	10 6	per yd.	delivered 2 miles radius Paddington
Pit Sand	13 9	,, ,,	
Thames Sand	14 6	,, ,,	
Best Washed Sand	14 6	,, ,,	
¾ in. Shingle for Ferro-Concrete	12 9	,, ,,	
½ in.	14 0	,, ,,	
¾ in. Broken Brick	11 6	,, ,,	
Pan Breeze	8 0	,, ,,	

Per ton delivered in London area in full van loads.

Best Portland Cement. British.

Standard Specification. Test £2 13 0 to £2 15 0 46s. alongside at Vauxhall in 80-ton lots.

Ferrocrete per ton extra on above	0	10	0
Super Cement (Waterproof)	4	3	0
Roman Cement	8	15	0
Parian Cement	5	15	0
Keene's Cement, White	5	15	0
,, ,, Pink	5	10	0
Plaster, Coarse, Pink	3	0	0
,, ,, White	3	12	6
,, Fine	5	12	0
Sirapite, Coarse	3	9	0
,, Finish	3	17	6
Grey Stone Lime	2	10	9
Chalk Lime	2	10	9
Best Ground Blue Lias Lime	2	13	6
Hair ..... per cwt.	2	2	6
Granite Chippings	1	12	0

NOTE.—Sacks are charged 1s. 9d. each and credited 1s. 6d. if returned in good condition within three months carr. pd.

Stourbridge Fireclay in s'cks 37s. 6d. per ton at rly. dp.

STONE.

BATH STONE.—Delivered in railway trucks at Westbourne Park, Paddington, G.W.R., or South Lambeth, G.W.R., per ft. cube ..... s. d. 2 10

PORTLAND STONE.—

Brown Whitbed, in random blocks of 20 ft. average, delivered in railway trucks at Nine Elms, L. & S.W.R., South Lambeth Station, G.W.R., and Westbourne Park, Paddington, G.W.R., per ft. cube 4 4½

Do. do. delivered on road wagons at above stations, per ft. cube 4 5½

White basebed, 3d. per ft. cube extra.

NOTE.—1d. per ft. cube extra for every foot over 20 ft. *average*, and ½d. beyond 30 ft.

HOPTON-WOOD STONE—

Delivered at any Goods Station, London.	s.	d.
Random blocks, from 10 ft. and over P. ft. cb.	17	0
Sawn two sides ..... ,,	27	0
Sawn three or four sides ..... ,,	32	0

YORK STONE, BLUE—*Robin Hood Quality.*

Delivered at any Goods Station, London.

6 in. sawn two sides landings to sizes (under 30 ft. super) ..... Per ft. super	5	6
6 in. rubbed two sides, ditto ..... ,,	6	0
3 in. sawn two sides slabs (random sizes) ,,	2	3½
2 in. to 2½ in. sawn one side slabs (random sizes) ..... ,,	1	6½
1¼ in. to 2 in. ditto, ditto ..... ,,	1	4

HARD YORK—

Delivered at any Goods Station, London.

Scappled random blocks ..... Per ft. cube	6	3
6 in. sawn two sides landing to sizes (under 40 ft. super) ..... Per ft. super	5	1½
6 in. rubbed two sides, ditto ..... ,,	6	1½
4 in. sawn two sides slabs (random sizes) ,,	2	10
3 in. ditto ditto ,,	2	1½
2 in. self-faced random flags .. Per yd. super.	9	0

CAST STONE.

Delivered in London area in full-van loads, per ft. cube:—Plain, 8s. 6d.; Moulded, 9s. 6d.; Cills, 10s. 0d.

WOOD.

GOOD BUILDING DEAL.

Inches.	per stan.	Inches.	per stan.
4 × 11	£28 0	3 × 6	£21 0
4 × 9	25 0	3 × 11	25 0
4 × 8	24 0	2 × 11	25 0
4 × 7	23 0	3 × 9	24 0
3 × 8	21 0	2½ × 9	23 0
3 × 7	20 0	3 × 4½	22 0
2½ × 7	20 0	3 × 4	22 0

PLANED BOARDS.

1 × 11 ..... £27 0 | 1 × 9 ..... 26 0

PLAIN EDGE FLOORING.

Inches.	per sq.	Inches.	per sq.
⅝	20/-	1¼	31/-
¾	22/-	1½	34/-
1	25/-		

TONGUED AND GROOVED FLOORING

Inches.	per sq.	Inches.	per sq.
1	25/-	⅝	16/6
1¼	31/-	¾	19/-
1½	34/-	1	24/-

MATCHING (BEST).

BATTENS.

Inches.	s.	d.
¾ × 2	2	6 per 100 ft.

SAWN LATHS.

Per bundle 0 2 4

1" AND UP THICK.

	£ s. d.		£ s. d.
Dry Austrian Wainscot, per ft. cube	0 16 0	to	0 18 0
Dry American and/or Japanese Figured Oak, ft. cube	0 15 0	to	—
Dry American and/or Japanese Plain Oak, ft. cube	0 11 0	to	0 13 0
Dry sq. edged Honduras Mahogany, ft. cube	0 16 0	to	0 18 0
Dry Log cut Honduras Mahogany, ft. cube	0 18 0	to	1 1 0
Dry Cuba Mahogany, ft. cube	1 4	to	1 10 0
Dry Teak, ft. cube	0 13 0	to	0 15 0
Dry American Whitewood, ft. cube	0 11 0	to	0 14 0
Best Scotch glue, per cwt.	4 10 0	to	—
Liquid Glue, per cwt.	4 7 0	to	5 10 0

SLATES.

First quality slates from Bangor or Portmadoc carriage paid in full truck loads to London Rate Station. Per 1,000.

	£ s. d.		£ s. d.
24 by 12	32 18 4	18 by 10	18 12 11
22 by 12	29 17 11	18 by 9	16 9 2
22 by 11	27 14 2	16 by 10	15 12 6
20 by 12	26 5 0	16 by 8	12 3 9
20 by 10	22 10 0		

TILES

Delivered at London rate stations in full truckloads of not less than 4 tons. Per 1,000 f.o.r. London.

Best machine-made tiles from Broseley or Staffordshire district		5	12 0
ditto hand-made ditto		5	17 6
Ornamental ditto		6	2 6
Hip and valley tiles (per dozen)	Hand-made	0	9 6
	Machine-made	0	9 0

METALS.

JOISTS, GIRDERS, &c., TO LONDON STATION, PER TON—

	£ s. d.
R.S. Joists, cut and fitted	12 10 0
Plain Compound Girders	14 10 0
,, ,, Stanchions	16 10 0
In Roof Work	19 10 0

MILD STEEL ROUNDS.

To London Station, per ton.

Diameter.	£ s. d.	Diameter.	£ s. d.
⅜ in.	12 0 0	⅝ in. to ½ in.	10 15 0
⅞ in.	11 0 0	⅝ in. to 2⅞ in.	10 10 0

WROUGHT-IRON TUBES AND FITTINGS—

(Discount off List for lot of not less than £7 net value delivered direct from Works, 2½ per cent. less above gross discounts, carriage forward, if sent from London Stocks.)

	Fittings. Tubes.	Fittings. Flanges. Over ½"	Fittings. Flanges. Over ½"
Black Gas	67½%	45%	55%
Galvanised Gas	52½%	35%	45%
Blue Water	62½%	40%	50%
Galvanised Water	46½%	30%	40%
Red Steam	57½%	35%	45%
Galvanised Steam	40 %	25%	35%

C.I.—HALF-ROUND GUTTERS—London Prices ex Works

Per yd. in 6 ft. lengths.	Gutters.	Angles and Nozzles.	Stop Ends.
3 in.	1/3½	11½d.	3½d.
3½ in.	1/4½	1/1½	3½d.
4 in.	1/6	1/3	3½d.
4½ in.	1/7½	1/4½	4½d.
5 in.	1/10½	1/6½	5½d.

O.G. GUTTERS.

3 in.	1/8	1/4½	3½d.
3½ in.	1/8	1/4½	3½d.
4 in.	1/9½	1/4½	3½d.
4½ in.	1/11½	1/7½	4½d.
5 in.	2/4½	1/10½	5½d.

RAIN-WATER PIPES, &c.

per yd. in 6 fts.	Pipe.	Bends, stock angles.	Branches, stock angles.
2 in. plain	1/10½	1/3	1/9½
2½ in. ,,	2/0½	1/4½	2/1½
3 in. ,,	2/6	1/9	2/7½
3½ in. ,,	2/11½	2/0½	3/0½
4 in. ,,	3/5	2/6½	3/8½

L.C.C. COATED SOIL PIPES—London Prices ex Works

	Pipe. s. d.	Bends, stock angles. s. d.	Branches, stock angles. s. d.
2 in. per yd. in 6 fts. plain	3 3	2 4½	2 10
2½ in. ,,	3 9	2 7½	3 7
3 in. ,,	4 6	2 10	4 2½
3½ in. ,,	4 11½	3 7	4 11½
4 in. ,,	5 5½	4 0½	5 9

L.C.C. COATED DRAIN PIPES—London Prices ex Works.

	Pipe. s. d.	Bends, stock angles. s. d.	Branches, stock angles. s. d.
3 in. per yd. in 9ft. lengths	4 4	5 1	8 0½
4 in. ,, ,,	6 2	5 8	10 0
5 in. ,, ,,	7 2	10 10	17 1
6 in. ,, ,,	8 6	13 2	21 9

Gasken for jointing, 38/6 per cwt.

	Per ton in London. £ s. d.		£ s. d.
IRON—			
Common bars	13 0 0	to	14 10 0
Staffordshire Crown Bars—			
Good merchant quality	14 5 0	to	15 15 0
Staffordshire Marked Bars	16 5 0	..	17 5 0
Mild Steel Bars	10 0 0	..	11 0 0
Steel Bars, Ferro-Concrete quality, basis price	10 0 0	..	11 0 0
Hoop iron, basis price	12 0 0	..	13 0 0
,, Galvanised	27 0 0	..	28 0 0
Soft Steel Sheets, Black—			
Ordinary sizes to 20 g.	13 5 0	..	14 5 0
,, ,, ,, 24 g.	14 5 0	..	15 5 0
,, ,, ,, 26 g.	16 5 0	..	17 5 0
Sheets Flat Best Soft Steel, C.R. and C.A. quality—			
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 22 g.	15 10 0	..	16 10 0
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 22 g. and 24 g.	16 10 0	..	17 10 0
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 26 g.	18 10 0	..	20 10 0

No. 1 quality £4 per ton extra.

Flat and Galvanised Corrugated Sheets—			
Ordinary sizes, 6 ft. to 9 ft. to 20 g.	18 0 0	..	19 0 0
Ordinary sizes, 6 ft. to 9 ft. to 22 g. and 24 g.	18 10 0	..	19 10 0
Ordinary sizes 6 ft. to 9 ft. to 26 g.	21 10 0	..	22 10 0
Sheets Galvanised Flat, Best quality—			
Best Soft Steel Sheets, 6 ft. by 2 ft. to 3 ft. to 20 g. and thicker	22 0 0	..	23 0 0
Best Soft Steel Sheets, 22 g. and 24 g.	24 0 0	..	26 0 0
Best Soft Steel Sheets, 26 g.	25 10 0	..	26 10 0
Cut Nails, 3 in. to 6 in.	19 0 0		

(Under 3 in. usual trade extras.)

METAL WINDOWS.—Standard sizes, suitable for complete houses, including all fittings, painting two coats, and delivery to job, average price about 1s. 4d. to 1s. 7d. per foot super.

LEAD, &c.

(Delivered in London.)	£ s. d.
LEAD—Sheet, English, 4 lb. and up	31 0 0
Pipe in coils	31 10 0
Soil pipe	34 10 0
Compo Pipe	33 0 0

NOTE.—Countrydelivery,20s.per ton extra; lots under 3 cwt. 3s. per cwt.extra, and over 3 cwt.and under 5 cwt., 1s. 6d. per cwt. extra. Cut to sizes. 5s. cwt. extra.

Oil lead, ex London area, at Mills ..... per ton 21 5 0

COPPER.

	s. d.
Seamless Copper tubes (basis) ..... per lb.	1 0½
Strong sheet ..... ,,	1 0
Thin ..... ,,	1 1
Copper nails ..... ,,	2 3
Copper wire ..... ,,	2 4

PLUMBERS' BRASS WORK.

Delivered in London.

NEW RIVER PATTERN SCREW DOWN BIB COCKS FOR IRON.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
29/-	45/-	75/-	153/-	246/-	510/- per doz.

NEW RIVER PATTERN SCREW DOWN STOP COCKS AND UNIONS.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
41/6	62/-	92/-	174/-	300/-	588/- per doz.

RIVER PATTERN SCREW DOWN MAIN FERRULES.

½ in.	¾ in.	1 in.
39/6	60/-	116/6 per doz.

CAPS AND SCREWS.

1¼ in.	1½ in	2 in.	3 in.	3½ in.	4 in.
7/6	10/-	14/-	23/-	30/-	42/- per doz.

DOUBLE NUT BOILER SCREWS.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
7/6	11/-	17/-	29/-	36/-	63/- per doz.

BRASS SLEEVES.

1¼ in.	2 in.	3 in.	3½ in.	4 in.
10/-	12/-	20/-	24/-	31/- per doz.

NEW RIVER PATTERN CROYDON BALL VALVES, S.F.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.
35/-	56/-	98/-	162/-	228/- per doz.

DRAWN LEAD P. & S. TRAPS WITH BRASS CLEANING SCREW.

1¼ in.	1½ in.	2 in.	3 in.
8 lbs. P. traps	33/-	41/-	56/-	101/- per doz.
8 lbs. S. traps	35/-	45/-	66/-	126/- ,,

TIN.—English Ingots, 3/1 per lb. SOLDER.—Plumber's 1/3, Tinmen's 1/6, Blowpipe 1/7 per lb.

PAINTS, &c.

Raw Linseed Oil, in pipes ..... per gallon	0	2	11
,, ,, ,, in barrels .. ,,	0	3	1
,, ,, ,, in drums .... ,,	0	3	3
Boiled ,, ,, in barrels .. ,,	0	3	3
,, ,, ,, in drums .... ,,	0	3	6
Turpentine in barrels ..... ,,	0	3	8
,, in drums (10 galls). ,,	0	3	10
Genuine Ground English White Lead, per ton (In not less than 5 cwt. casks.)	47	5	0
GENUINE WHITE LEAD PAINT— "Father Thames," "Nine Elms," "Park," "Supremus," "St. Paul's," "Morganswyte," "Polacco," "J." Brand, and other best brands (in 14 lb. tins) not less than 5 cwt. lots per ton delivered	66	15	0
Red Lead, Dry (packages extra) .. per ton	34	10	0
Best Linseed Oil Putty ..... per cwt.	0	15	0
Filicol ..... ,,	0	15	6
Size. XD quality ..... ,kn.	0	3	6

(Continued on p. 35.)

* The information given on this page has been specially compiled for THE BUILDER, and is copyright. The aim in this list is to give, as far as possible, the *average* prices of materials, not necessarily the highest or lowest. Quality and quantity obviously affect prices—a fact which should be remembered by those who make use of this information.

PRICES CURRENT OF MATERIALS (*contd.*)

GLASS.

ENGLISH SHEET GLASS IN CRATES OF STOCK SIZES.

	Per ft.		Per ft.
15 oz. fourths ..	2½d.	32 oz. fourths	6½d.
15 ,, thirds ..	3½d.	32 ,, thirds.....	9½d.
21 ,, fourths ..	4d.	Obscured Sheet, 15 oz.	3½d.
21 ,, thirds....	4½d.	,, ,, 21 ,,	4½d.
26 ,, fourths ..	4½d.	Fluted 15oz.6½d., 21oz.	9d.
26 ,, thirds....	6½d.	En'lled 15 oz.4½d.,21oz.6½d.	

Extra price according to size and substance for squares cut from stock.

ENGLISH ROLLED PLATE IN CRATES OF STOCK SIZES. Per ft.

⅛ Rolled plate	4½d.
⅜ Rough rolled	5½d.
¼ Rough rolled	5½d.
Figured Rolled, Baltic, Oceanic, Arctic Stippolyte, and small and large Flemish White	6d.
Ditto, tinted	8½d.
Rolled Sheet	5½d.
White Rolled Cathedral	5½d.
Tinted do.	7½d.

Cast plate is same price as rough rolled.

VARNISHES, &c.

		Per Gallon. £	s.	d
Oak Varnish	Outside	0	14	0
Fine ditto	ditto	0	16	0
Fine Copal	ditto	0	18	0
Pale Copal	ditto	1	0	0
Pale Copal Carriage	ditto	1	4	0
Best ditto	ditto	1	12	0
Floor Varnish	Inside	0	18	0
Fine Pale Paper	ditto	0	18	0
Fine Copal Cabinet	ditto	1	2	6
Fine Copal Flatting	ditto	1	0	6
Hard Drying Oak	ditto	0	18	0
Fine Hard Drying Oak	ditto	0	19	0
Fine Copal Varnish	ditto	1	0	0
Pale ditto	ditto	1	2	0
Best ditto	ditto	1	12	0
Best Japan Gold Size		0	12	6
Best Black Japan		0	10	6
Oak and Mahogany Stain (water)		0	12	0
Brunswick Black		0	7	6
Berlin Black		0	14	6
Knotting (patent)		1	5	0
French and Brush Polish		0	17	0
Liquid Dryers in Terebine		0	9	0
Cuirass Black Enamel		0	7	0

Town-Planning Scheme at Aberdeen.

The Town-Planning Committee of Aberdeen Town Council report having had under consideration a memorandum embodying recommendations of representatives of the Aberdeen Town Council, the Aberdeen District Committee, and the Lower Deeside District Committee—the local authorities interested in the proposed joint town-planning scheme. With regard to the matter of procedure, the representatives of the local authorities interested had unanimously resolved to recommend that a joint committee, to be called the Aberdeen and District Joint Town-Planning Committee, be established for the purpose of preparing a town-planning scheme. The committee adopted the memorandum, which they submitted for the approval of the Council

Incorporation of Architects in Scotland.

The monthly meeting of the Incorporation of Architects in Scotland was held at 15, Rutland-square, Edinburgh—Mr. G. P. K. Young, F.R.I.B.A., Perth, presiding. It was reported that six Scottish candidates had sat the R.I.B.A. final examinations at the Incorporation Chambers this month. A portrait of the late Sir Rowand Anderson, painted by Mr. J. M. Aitken, A.R.S.A., for the Incorporation, was on view in Council Room. It was decided to hold the annual conference in Edinburgh on June 1 and 2, 1928. The Council expressed their gratification on the honour recently bestowed upon their member, Sir Robert Lorimer. Mr. Frank Wood, Edinburgh, was elected as an Associate, and Mr. A. G. Laird and Mr. J. R. Baxter, Dundee, as student members.

Dunkeld Cathedral.

We learn that the Duke of Atholl has presented the Choir of Dunkeld Cathedral, the only part now used for worship, to the Church of Scotland General Trustees. The cathedral is one of the most historic buildings in Scotland, and the Office of Works have been busy preserving portions of the fabric that were in imminent danger of falling. The work of preservation has now been completed. A fracture in the West tower has been treated by grouting and pointing and the foundations made secure.

THE SCOTTISH BUILDER

HOUSING PROGRESS IN SCOTLAND

The following figures show the progress that has been made in State-aided housing schemes in Scotland to November 30, 1927 :—

	Completed.	Under Construction.
1919 Act	25,550	—
Private subsidy schemes (1919 Additional Powers Act)	2,324	—
Slum clearance schemes ...	6,362	3,005
1923 Act :—		
By local authorities ...	3,857	148
By private enterprise ...	11,380	2,616
1924 Act :—		
By local authorities ...	16,548	11,943
By private enterprise ...	394	139
Demonstration houses ...	17	—
Steel houses erected on behalf of Government by Scottish National Housing Company	2,100	442
	68,532	18,293

NEW BUILDINGS IN SCOTLAND

Edinburgh. — SCHOOLS. — The Edinburgh Education Authority are proposing to erect the following schools :—New preparatory school for the Royal High School at Jock's Lodge; school at Prestonfield for 700 pupils; and school at Saughton Mains for 700 pupils. The whole scheme is estimated to cost £80,000.

Edinburgh.—HOUSES.—Warrants have been granted by the Edinburgh Dean of Guild Court for the erection of a villa at Liberton and a bungalow at Barnton. The Corporation have also been authorised to proceed with a tenement containing 26 houses and six shops at the corner of High-street and Rosefield-avenue, Portobello.

Rothesay.—HOUSES.—The late Mr. J. J. Wilkie, of Southampton, has bequeathed £20,000 to Rothesay for the purpose of building homes for widows and spinsters.

Glasgow.—A further extension of the Knightswood housing scheme has been authorised by the Glasgow Dean of Guild Court. The Court also granted linings for a rehousing scheme at Westmuir-street, Parkhead.

The principal applications granted were :—Glasgow Corporation Housing Department —500 houses and roads and sewers at Knightswood, No. 9 Area, and 36 tenement houses at Westmuir-street.

Woodend Bowling and Tennis Club—Pavilion and hall at Chamberlain-road, Jordanhill.

Elgin.—IMPROVEMENTS.—Three big schemes for roads, water, and public baths, which combined will involve an expenditure of about £15,000, has been generally approved by Elgin Town Council.

North Berwick.—HOUSES.—Tenders are now being invited by the Town Council for the erection of houses in Lochbridge-road. Plans have been prepared by Mr. A. Robertson, Burgh Surveyor to the North Berwick T.C.

Dunfermline.—EXTENSION.—A donation of £6,000 has been made by the Miners' Welfare Fund towards the effort to raise £50,000 for the purpose of extending the Dunfermline and West Fife Hospital.

Arbroath.—ADDITIONS.—The Arbroath Infirmary directors have agreed to recommend to the trustees of the late Sir James Duncan, of Kinnettles, that the sum of £11,000 which they contemplate allocating from Mr. Duncan's estate to the Infirmary be used as follows :—£3,000 for a children's ward, £2,500 for extension of nurses' home, rooms for directors' and board meetings; £1,000 on the out-patient department, and £4,000 in the endowment of beds.

Musselburgh.—HOUSES.—Tenders are now being invited for the erection of 52 houses for the Town Council. Plans have been prepared by the Burgh Surveyor.

BUILDING TRADE WAGES IN SCOTLAND.*

THE following are the present rates of wages in the building trade in the principal towns of Scotland. Every endeavour is made to ensure accuracy, but we cannot be responsible for errors that may occur :—

	Masons.	Bricklayers.	Carpenters, Joiners.	Plasterers.	Slaters.	Plumbers.	Painters.	Labourers—Masons', Bricklayers' Plasterers'.
Aberdeen	1/8	1/8½	1/8	1/8	1/8	1/8	1/7	10½d. to 1/1
Airdrie	1/8	1/8	1/8	1/8	1/8	—	1/6½	1/3
Alexandria	1/8	1/8	1/8	1/8	1/8	1/8	—	1/2½ to 1/3½
Arbroath	1/7	1/7	1/7	1/7½	1/7	1/7	1/5½	1/1½
Ayr	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3
Bathgate	1/8	1/8	1/8	1/8½	1/8	1/8	1/6½	1/2 to 1/3
Blairgowrie	1/7	1/7	1/7	1/7½	1/5	1/7	1/4	10d. to 1/-
Bo'ness	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Coatbridge	1/8	1/9	1/8	1/8	1/8	—	1/6½	1/3½
Dumbarton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Dumfries	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Dundee	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Dunfermline	1/8	1/8	1/8	1/9	1/8	1/8	1/8	1/3½
Edinburgh	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Falkirk	1 7½	1 7½	1/7	1/8	1/7	1/7	1/6½	1/2½
Fort William	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/2
Galashiels	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Glasgow	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Greenock	1/8	1/8	1/8	1/9	1/8	1/8	1/7	1/0½ to 1/3½
Hamilton	1/8	1/8	1/8	1/9	1/8	1/8	1/6½	1/3½
Hawick	1/7	1/7	1/7	1/7-1/7½	1/7	1/7	1/7	1/2½
Helensburgh	1/8	1/8	1/8	1/9	1/8	1/8	1/7	1/3½
Inverness	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/- to 1/2
Kilmarnock	1/8	1/8	1/8	1/9	1/8	1/8	1/8	1/3½
Kirkcaldy	1/8	1/8	1/8	1/9	1/8	1/8	1/8	1/3½
Kirkwall	1/5	1/5	1/4	1/5	1/5	1/4	1/4	1/-
Lanark	1/8	1/8	1/8	1/9	1/8	1/8	1/6	1/- to 1/2
Leith	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Motherwell	1/8	1/8	1/8	1/9	1/8	1/8	1/6½	1/3½
Perth	1/8	1/8	1/8	1/9	1/8	1/8	1/6½	1/3
Stirling	1/8	1/8	1/8	1/9	1/8	1/8	1/8	1/3½
Stirlingshire (Eastern District)	1/8-1/10	1/8-1/10	1/8	1/9	1/7	1/8	1/6½	1/3½
Wishaw	1/8	1/8	1/8	1/9	1/8	1/8	1/7	1/3½

* The information given in this table is copyright. The rates of wages in the various towns in England and Wales are given on page 29.

CURRENT PRICES FOR BUILDING WORK IN LONDON*

EXCAVATOR.

		s.	d.
Digging and throwing or wheeling and filling carts, and carting away to shoot—6 ft. deep	per yard cube	11	0
Add if in clay	" "	1	0
Add for every additional depth of 6 ft.	" "	0	6
Planking and strutting to trenches	per foot super	0	5
Do. to sides of excavation, including shoring	" "	1	0

CONCRETOR.

		s.	d.
Portland cement concrete in foundation 1 to 6	per yard cube	38	0
Add if in underpinning in short lengths	" "	7	0
Add if in floors 6 in. thick	" "	3	3
Add if in beams	" "	3	9
Add if aggregate 1 : 2 : 4	" "	10	0
Add for hoisting not exceeding 10 ft. beyond the first 10 ft.	" "	2	6

BRICKLAYER.

		£	s.	d.
Reduced brickwork in lime mortar and Fletton bricks	per rod	32	0	0
Add if in stocks	"	7	10	0
Add if in Staffordshire blues	"	22	0	0
Add if in Portland cement and sand	"	1	10	0

FACINGS.

		s.	d.
Extra for facing in English or Flemish bond for every 10s. per 1,000 over the price of the common bricks	per ft. super	0	1½

POINTING.

		s.	d.
Neat flat struck or weathered joint	" "	0	3

ARCHES.

		s.	d.
Extra only to the price of ordinary brickwork :—			
Fair external in half brick rings	" "	0	10
Axed in stocks	" "	1	9
Rubbed and gauged jointed in putty camber or segmental	" "	6	0

SUNDRIES.

		s.	d.
Damp course in double course of slates breaking joint and bedded in Portland cement	" "	1	0
Setting ordinary register grates and stoves	each	1	0
Setting kitchener, including forming flues, &c., with all necessary fire bricks	"	4	15

ASPHALTER.

		s.	d.
Half-inch horizontal damp course	per yard super	4	6
Three-quarter-inch vertical damp course	" "	9	6
Three-quarter-inch on flats in two thicknesses	" "	6	3
Angle fillet	per foot run	0	3
Skirting and fillet 6 in. high	" "	1	2

MASON.

		s.	d.
York stone templates fixed	per foot cube	13	0
York stone sills fixed	" "	22	0
Bath stone and all labour fixed	" "	10	6
Portland stone fixed	" "	20	0

SLATER.

		s.	d.
Welsh 16 in. × 8 in. 3 in. lap, including nails	per square	72	9
Do. 20 in. × 10 in. Do. Do.	"	80	9
Do. 24 in. × 12 in. Do. Do.	"	90	0

CARPENTER AND JOINER.

		s.	d.
Fir framed in plates	per foot cube	5	0
Do. joists	" "	5	6
Do. roofs, floors and partitions	" "	6	0
Do. trusses	" "	8	6

		¾"	1"	1¼"	2"
Deal rough close boarding	per sq.	35/6	40/-	45/-	72/-

		s.	d.
Flat centering for concrete floor, including struts or hangers	"	50	0
Do. to beams	per ft. sup.	1	0
Centre for arches	"	1	6
Gutter boards and bearers	"	1	0

FLOORING.

		¾"	1"	1¼"	1½"
Deal-edges shot	per sq.	—	44/6	53/-	60/6
Do. tongued and grooved	"	—	49/-	57/6	65/-
Do. matchings	"	45/-	51/-	—	—
Moulded skirting, including backings and grounds	per ft. sup.	1/6	1/9	2/-	2/6

SASHES AND FRAMES.

		s.	d.
One-and-a-half moulded sashes or casements	per foot super	1	10
Two Do. Do. Do.	" "	2	1
Add for fitting and fixing	" "	0	3
Deal-cased frames with 1 in. inner and outer linings, 1¼ in. pulley stiles tongued to linings, hard wood sills with 2 in. moulded sashes in squares, double hung, double hung with pulleys, lines and weights; average size	" "	3	9

DOORS.

		1½"	1¾"	2"
Two-panel square framed	per ft. sup.	2/1	2/4	2/6
Four-panel Do.	"	2/5	2/8	2/11
Two-panel moulded both sides	"	2/8	2/11	3/2
Four-panel Do. Do.	"	2/11	3/2	3/5

CARPENTER AND JOINER—continued.

FRAMES.

		s.	d.
Deal wrot moulded and rebated	per foot cube	14	0

		1"	1¼"	1½"
Plain deal jamb linings framed	per ft. sup.	1/7	1/8	1/11
Deal shelves and bearers	"	1/4	1/6	1/9
Add if cross-tongued	"	2d.	2d.	2d.

STAIRCASES.

	1"	1¼"	1½"	2"	2½"
Deal treads and risers in and including rough brackets	2/1	2/4	2/9	—	—
Deal strings wrot on both sides and framed	1/8	2/-	2/2	2/8	—

		s.	d.
Housings for steps and risers	each	0	11
Deal balusters, 1 in. × 1¼ in.	per ft. run	0	9
Mahogany handrail : average, 3 in. × 3 in.	" "	6	0
Add if ramped	" "	12	0
Add if wreathed	" "	24	0

FIXING ONLY IRONMONGERY (INCLUDING SCREWS).

6 in. barrel bolts	8½d.	Rim locks	2/-
Sash fasteners	11½d.	Mortice locks	4/6
Casement fasteners	1/5	Patent spring hinges and letting into floor and making good	19/-
Casement stays	1/2		
Cupboard locks	1/5		

FOUNDER AND SMITH.

		s.	d.
Rolled steel joists	per cwt.	16	3
Plain compound girders	"	19	0
Do. stanchions	"	21	9
In roof work	"	27	6

RAIN-WATER GOODS.

		3"	4"	5"	6"
Half-round plain rebated joints	ft. run	1/6	1/9	2/-	2/6
Ogee Do. Do.	"	1/9	2/-	2/6	3/3
Rain-water pipes with ears	"	1/9	2/7	—	—
Extra for shoes and bends	each	4/4	5/11	—	—
Do. stopped ends	"	1/11	2/4½	3/7	4/-
Do. nozzles for inlets	"	2/2	2/7	3/10	4/3

PLUMBER.

		s.	d.
Milled lead and laying in flashings and gutters	per cwt.	43	0
Do. Do. in flats	"	42	0
Extra labour and solder in coated cesspools	each	6	9
Welf joint	per ft. run	0	6
Soldered seam	" "	1	3
Copper nailing	" "	0	4

		½"	¾"	1"	1½"	2"	4"
Drawn lead waste	per ft. run	1/2	1/9	2/-	3/4	4/-	—
Do. service	"	1/8	2/2	2/7	3/10	—	—
Do. soil	"	—	—	—	—	—	6/9
Bends in lead pipe	each	—	—	—	—	3/3	8/2
Soldered stop ends	"	1/2	1/8	2/1	2/10	3/6	—
Red lead joints	"	11d.	1/-	1/3	1/11	2/4	4/10
Wiped soldered joints	"	2/10	3/6	4/-	4/11	6/6	9/9
Lead traps and cleaning screws	"	—	—	—	14/7	19/6	—
Bib cocks and joints	"	6/4	9/7	15/4	41/-	—	—
Stop cocks and joints	"	15/4	17/2	25/8	64/-	—	—

PLASTERER.

		s.	d.
Render, float and set in lime and hair	per yard. sup.	2	6
Do. Do. Sirapite	" "	2	9
Do. Do. Keen's	" "	4	0
Add saw lathing	" "	1	7
Add metal lathing	" "	2	6
(Not including hangers or runners, etc., for suspended ceilings.)			
Portland cement screed	" "	2	2
Do. plain face	" "	3	3
Mouldings in plaster	per 1 girth	0	1¾
One-and-a-half granolithic pavings	per yard sup.	5	9

GLAZIER.

		s.	d.
21-oz. sheet plain	per foot sup.	0	8½
26-oz. Do.	" "	1	0
Obscured sheet	" "	1	1
¼-in. rolled plate	" "	0	9
¼-in. rough rolled or cast plate	" "	0	10½
¼-in. wired cast plate	" "	1	4

PAINTER.

		s.	d.
Preparing and distempering, 2 coats	per yard sup.	0	9
Knotting and priming	" "	0	7
Plain painting, 1 coat	" "	0	9
Do. 2 coats	" "	1	2
Do. 3 coats	" "	1	9
Do. 4 coats	" "	2	4
Graining	" "	2	3
Varnishing twice	" "	1	9
Sizing	" "	0	3
Flatting	" "	0	7
Enamel	" "	1	1
Wax polishing	per foot sup.	0	6
French polishing	" "	1	2
Preparing for and hanging paper	per piece, 2/- to 4/-		

* These prices apply to *new buildings only*. They cover superintendence by foreman and carry a profit of 10% on the prime cost without establishment charges. A percentage of 1½ should be added for Employers' Liability and National Health and Unemployments Acts and from 1s. 6d. per £100 for Fire Insurance. The whole of the information given on this page is copyright.